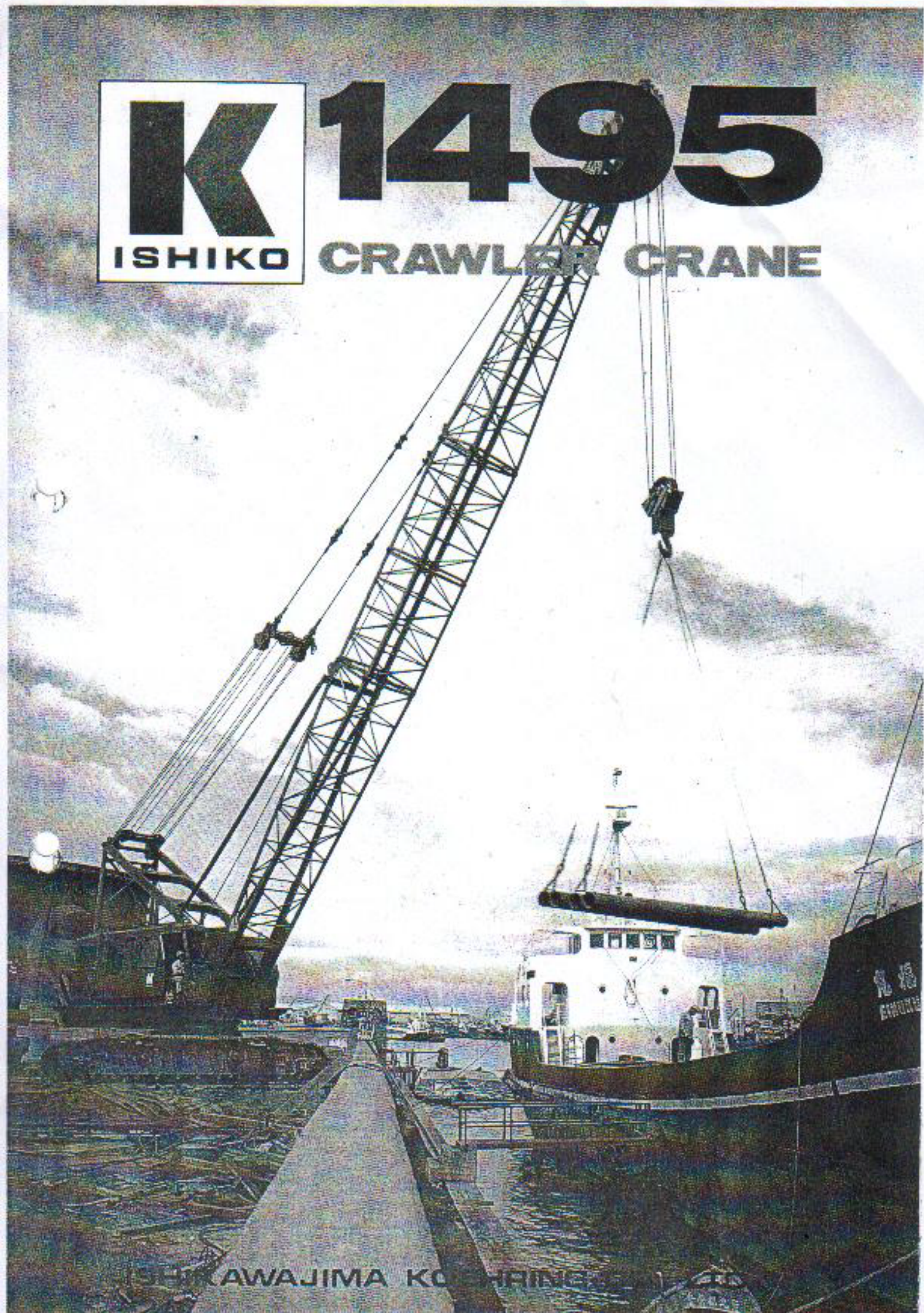




1495

CRAWLER CRANE



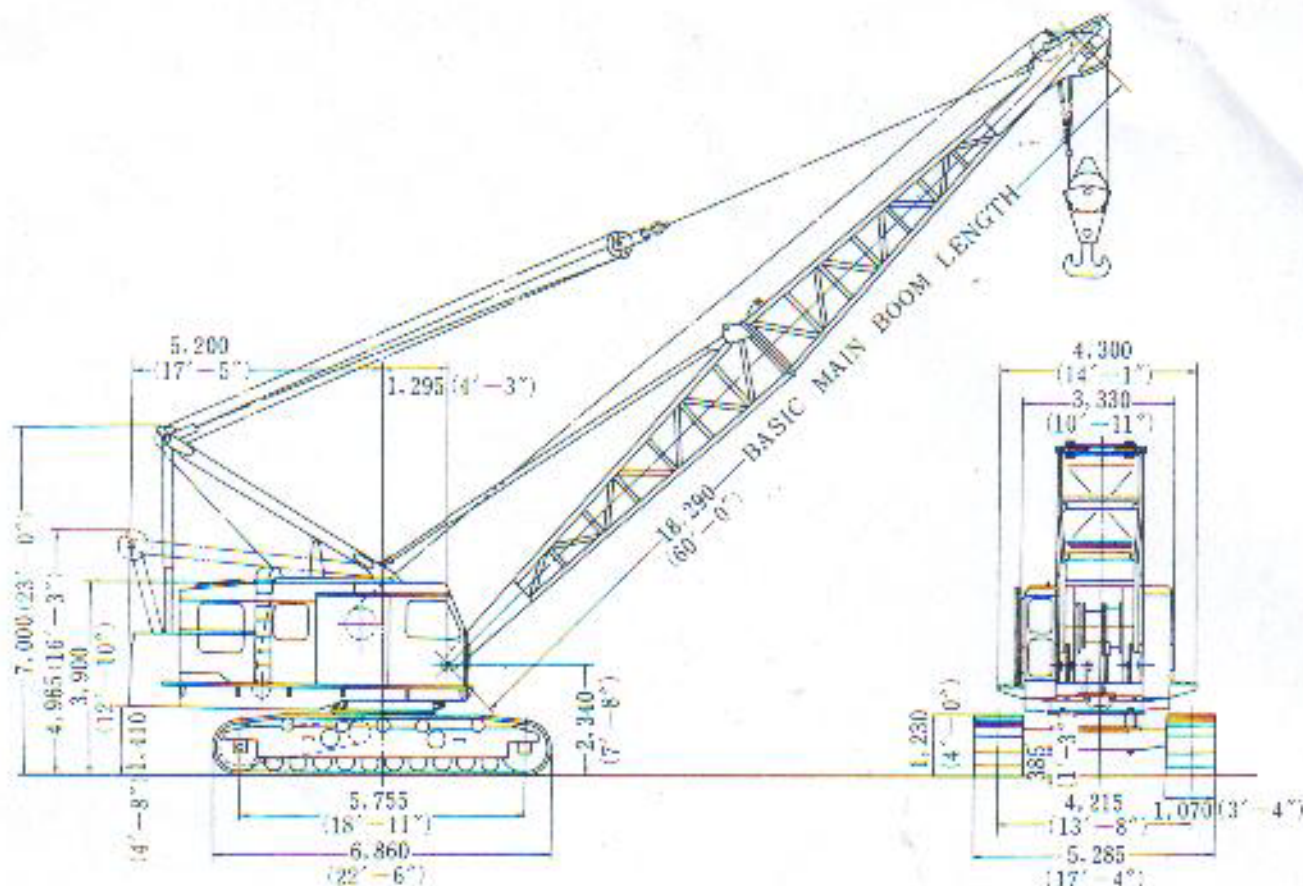
ISHIKAWAJIMA KOSHIRINGO



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GENERAL DIMENSIONS



CONDENSED SPECIFICATIONS

MAX. LIFTING CAPACITY.....	100t (220,000 lbs) × 4.7m (15' - 5")
MAIN BOOM LENGTH.....	18.29m (60') ~ 51.82m (170')
MAX. JIB BOOM LENGTH.....	9.14m (30')
MAIN BOOM + JIB BOOM.....	48.77m (160') + 9.14m (30')
TOTAL WEIGHT (With 18.29m 60' main boom).....	110t (243,000 lbs)
SWING SPEED.....	2.5 r.p.m.
TRACTION SPEED.....	1.0km/hr (0.6 M.P.H.)
GRADABILITY.....	30% (ABOUT 17')
GROUND PRESSURE.....	0.85kg/cm ² (12.1 lbs/sq.in.)
HOIST ROPE SPEED.....	45m/min. (147 ft./min.)
LOWERING ROPE SPEED.....	10m/min. (33 ft./min.)
BOOM HOIST SPEED.....	2m/min. (6.6 ft./min.) dual 14 part line
BOOM LOWERING SPEED.....	2m/min. (6.6 ft./min.) dual 14 part line

ENGINE DATA

MAKER.....	CATERPILLAR
MODEL.....	D343-AT
TYPE.....	4cycle, water cooled, diesel engine
POWER TAKE OFF.....	Torque Converter (CLARK # 16.1)
HORSE POWER.....	304PS (300 HP)/2,000 r.p.m.



LIFTING CAPACITIES

Over End or Over Back, within 75% of Tipping Load

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RADIUS IN METER	LENGTH OF MAIN BOOM IN METER											
	18.29 (60')	21.34 (70')	24.38 (80')	27.43 (90')	30.48 (100')	33.53 (110')	36.58 (120')	39.62 (130')	42.67 (140')	45.72 (150')	48.77 (160')	51.80 (170')
4.7	100.0											
5	93.0	(800x52)	(680x57)									
6	69.1	67.0	65.0	(500x62)	(520x65)							
7	54.2	54.0	53.8	53.0	50.5	(450x73)	(450x78)					
8	44.4	44.2	43.9	43.7	43.5	41.0	39.1	(350x84)	(310x89)			
9	37.5	37.2	37.0	36.8	36.6	36.0	35.0	33.0	30.5	(270x94)		
10	32.2	32.0	31.6	31.6	31.4	31.2	30.7	29.8	28.0	25.7	24.0	(210x103)
12	25.2	24.9	24.7	24.5	24.3	24.1	23.9	23.6	23.2	22.0	21.0	19.3
15	18.6	18.4	18.2	18.0	17.8	17.6	17.4	17.2	16.9	16.7	16.4	16.0
18		14.3	14.1	13.9	13.7	13.5	13.3	13.1	12.9	12.7	12.5	12.2
21			11.3	11.1	10.9	10.7	10.5	10.3	10.1	9.8	9.6	9.4
24				9.2	8.9	8.7	8.5	8.3	8.0	7.8	7.6	7.4
27					7.4	7.2	7.0	6.8	6.6	6.4	6.1	5.9
30						5.9	5.7	5.5	5.3	5.1	4.9	4.7
33							4.8	4.6	4.4	4.2	3.9	3.7
36									3.5	3.3	3.1	2.9
39										2.7	2.4	2.3

Over End or Over Back, within 75% of Tipping Load

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RADIUS IN FEET	LENGTH OF MAIN BOOM IN FEET											
	60'	70'	80'	90'	100'	110'	120'	130'	140'	150'	160'	170'
15' - 5"	220,500											
16'	211,200	(176,500) (x17'-5")										
18'	178,600	158,100	(152,100) (x18'-5")									
20'	148,200	145,500	140,000	(132,300) (x20'-4")	(114,500) (x22'-4")	(95,200) (x25'-11")						
25'	105,200	104,800	104,300	103,900	101,400	95,500	(86,200) (x25'-7")	(77,200) (x27'-6")	(68,300) (x29'-2")			
30'	80,900	80,300	79,900	79,500	79,000	78,500	75,500	71,700	66,400	(55,500) (x30'-10")	(50,500) (x32'-5")	(46,300) (x34'-5")
35'	65,500	64,900	64,400	63,800	63,300	62,900	62,400	61,100	58,000	54,200	50,700	45,800
40'	54,300	53,700	53,200	52,600	52,400	52,000	51,500	51,100	50,000	47,800	45,600	41,900
50'	40,200	39,700	39,200	38,600	38,300	37,900	37,400	37,000	36,400	36,000	35,300	34,600
60'		31,000	30,600	30,100	29,600	29,100	28,600	28,200	27,600	27,200	26,600	26,100
70'			24,300	23,800	23,400	23,000	22,600	22,200	21,600	21,200	20,600	20,100
80'				19,800	19,200	18,800	18,300	17,900	17,300	16,900	16,300	15,800
90'					15,900	15,500	15,000	14,600	14,000	13,600	13,000	12,500
100'						12,900	12,400	12,000	11,400	11,000	10,400	9,900
110'							10,300	9,900	9,300	8,900	8,300	7,800
120'									7,500	7,200	6,600	6,100
130'										5,700	5,100	4,700

Notes:

1. Values given on the above table are those observed on the level, hard soil, including the weight of such lifting tools as hook block. Therefore, the actual weight which can be lifted will be the value after deduction of the weight of the lifting tool used.

For main booms 100t hook block 2.4t
(5,300 lbs) - 5 Sheaves
50t hook block 0.76t
(1,700 lbs) - 2 Sheaves
30t hook block 0.62t
(1,400 lbs) - 1 Sheaves

2. The allowable load over jib sheaves at any radius from center of rotation is the same load that may be lifted over main boom sheaves with the boom lowered to that radius but not to exceed 4.5t (10,000 lbs). Also, with main hook block attached to it, the actual weight of lifting on the jib must be the value after deduction of the weight of the main hook block and hook block for the jib from those given on the above table.

For jib boom 5t hook block 0.25t (550 lbs)

3. Fitting angle of the jib boom against the extension of the main boom shall not exceed 15° with a 9.14m (30') jib in use for lifting, and 30° with a jib of less than 7.62m (25').

4. Main boom sheave loads must be reduced as follows when jib attached:

4.57m (15')	jib boom	1.05t (2,300 lbs)
6.10m (20')	jib boom	1.20t (2,700 lbs)
7.62m (25')	jib boom	1.35t (3,000 lbs)
9.14m (30')	jib boom	1.50t (3,300 lbs)

5. Maximum working radius of a jib shall not exceed the maximum working radius of the main boom used at that time.

6. Allowable lifting load against clamshell, dragline, and lifting magnet shall be within 90% of the values given on the above table. These operations cannot be performed with a jib boom.

7. In loading clamshell operations, the total of bucket weight and contents shall not exceed 10.3t (22,700 lbs), and in case of dragline operations, it shall not exceed 9.3t (20,500 lbs).

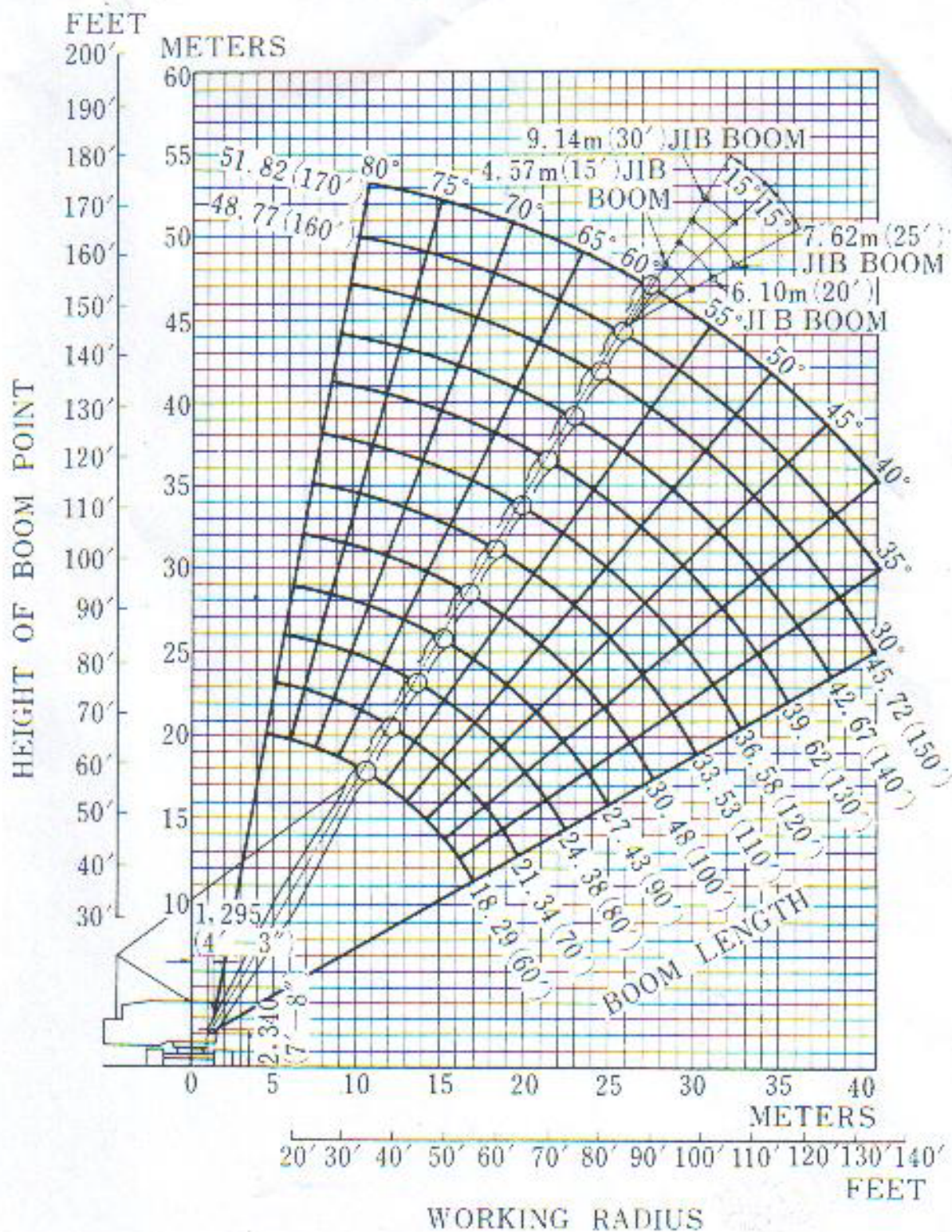
8. At the time of operations, the A-Frame must be used with erected.



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1495

WORKING RANGES



■ MAIN BOOM CONSTITUTION

INNER BOOM	9.15 m (30')
OUTER BOOM	9.15 m (30')
INSERT BOOM	3.05 m (10')
	6.10 m (20')

■ JIB BOOM LENGTH

4.57 m (15')
6.10 m (20')
7.62 m (25')
9.14 m (30')

■ MAX. MAIN BOOM LENGTH

IN CASE OF BUCKET OPERATION 36.58m (120')

■ MAX. MAIN BOOM LENGTH

WITH JIB BOOM ATTACHMENT 48.77m (160')