working ranges

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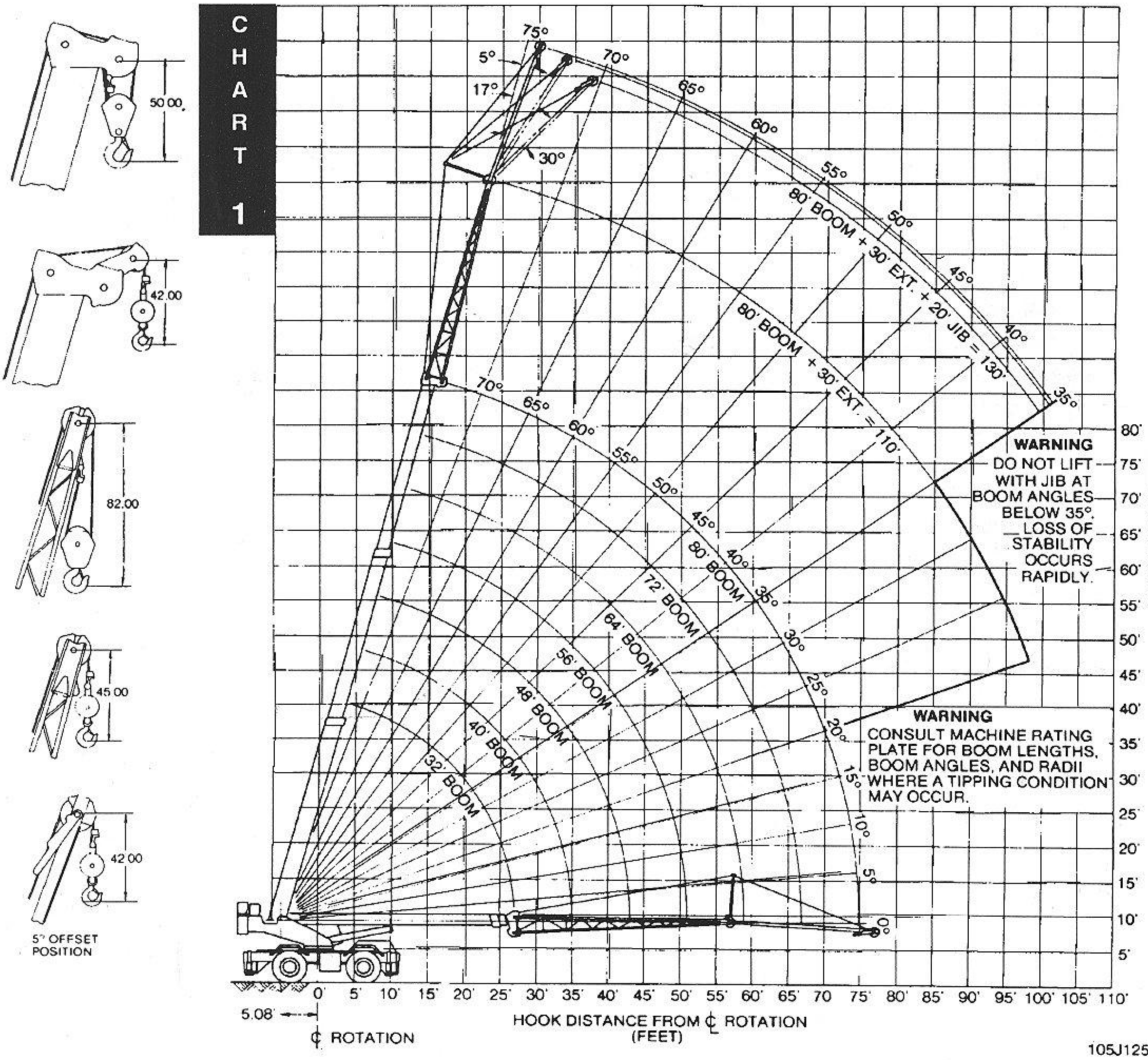

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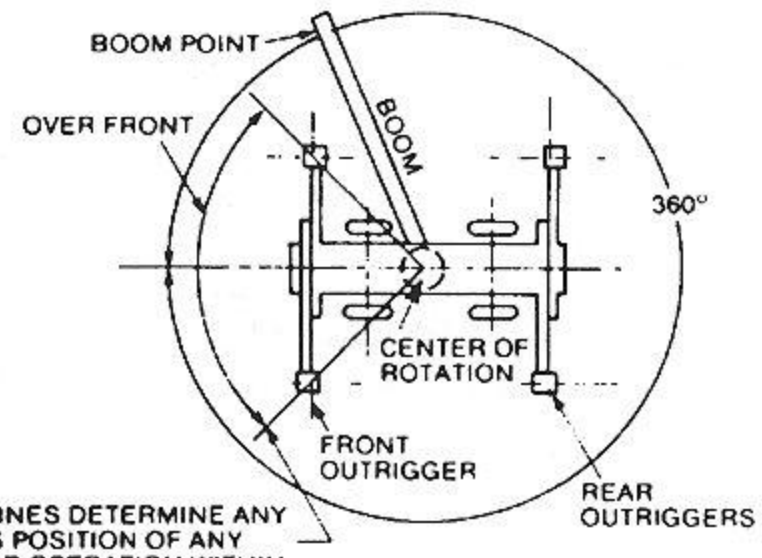
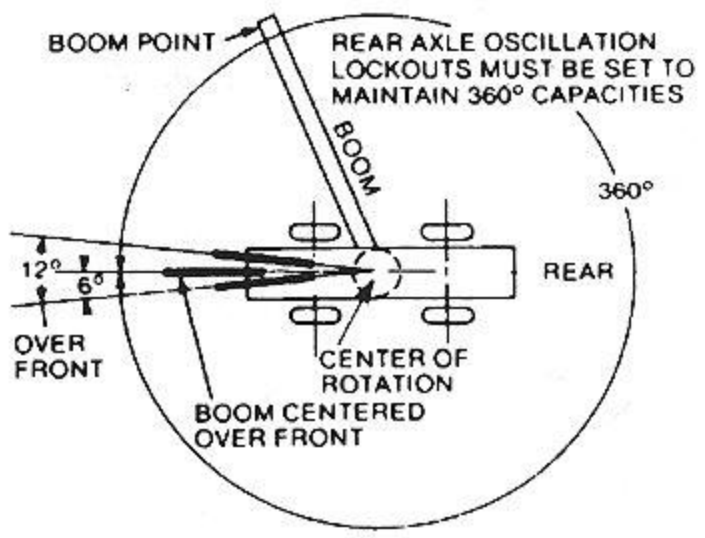
areas of operation

ON OUTRIGGERS



ON RUBBER



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Three Section Full Powered Boom on Outriggers
Rated Crane Loads in Pounds
Boom in 360° and Over Front Work Areas

CHART 2

OPERATING RADIUS IN FT.	BOOM LENGTH IN FEET																					OPERATING RADIUS IN FT.
	32 FT.			40 FT.			48 FT.			56 FT			64 FT.			72 FT.			80 FT.			
	△°	RATED LOAD IN POUNDS		△°	RATED LOAD IN POUNDS		△°	RATED LOAD IN POUNDS		△°	RATED LOAD IN POUNDS		△°	RATED LOAD IN POUNDS		△°	RATED LOAD IN POUNDS		△°	RATED LOAD IN POUNDS		
		360°	FRONT		360°	FRONT		360°	FRONT		360°	FRONT		360°	FRONT		360°	FRONT		360°	FRONT	
10	66	70000	70000	71	60000	60000																10
12	61	50000	50000	68	50000	50000	72	50000	50000	75	46000	46000										12
15	55	43000	43000	63	43000	43000	68	43000	43000	72	43000	43000	74	35500	35500							15
20	42	30000	30000	54	30000	30000	61	30000	30000	66	30000	30000	70	30000	30000	72	27000	27000	75	25000	25000	20
25	24	22800	22800	44	22800	22800	54	22800	22800	60	22800	22800	65	22800	22800	68	22800	22800	71	21000	21000	25
30				32	17200	18000	44	17200	18000	54	17200	18000	59	17200	18000	64	17200	17500	67	17200	17200	30
35							36	13100	14400	47	13100	14400	54	13100	14400	59	13100	14400	63	13100	14400	35
40							23	10000	11250	39	10000	11250	48	10000	11250	54	10000	11250	58	10000	11250	40
45										29	8200	8800	41	8200	8800	48	8200	8800	54	8200	8800	45
50	**CAUTION:** FOR 32 FOOT BOOM LENGTH RATINGS, TELESCOPE CYLINDERS MUST BE FULLY RETRACTED AND AGAINST STOPS.									13	6550	7300	33	6550	7300	42	6550	7300	49	6550	7300	50
55													22	5300	6050	36	5300	6050	44	5300	6050	55
60																28	4400	5000	38	4400	5000	60
65																			31	3700	4200	65
70							**WARNING: Do not exceed rated load radius for a rated load.**												22	3050	3250	70
75																			11	2500	2850	75

Warning: Main boom ratings must be reduced by weight of fixed boom attachments. See Chart no. 8.

Ratings above heavy line are based on structural competence and not the machine stability.

CHART 3

LATTICE EXTENSION 110 FT.			OPERATING RADIUS IN FT.
LOADED BOOM ANGLE △°	RATED LOAD IN POUNDS 360°	FRONT	
73	12000	12000	30
71	10700	10700	35
68	9800	9800	40
65	8100	8100	45
62	7300	7300	50
59	6400	7100	55
56	5200	6050	60
52	4500	5600	65
49	3700	4250	70
46	3100	3700	75
41	2500	3100	80
37	2050	2600	85
32	1700	2200	90
26	1400	1800	95
19	1150	1400	100

WARNING

For boom lengths less than 110 feet with boom extension erected, the rated loads are determined by boom angle only in the column headed by 110 foot boom. For boom angles not shown, use rating of next lower boom angle.

CHART 4

JIB RATINGS MAX. LOAD RATINGS IN POUNDS			
MIN. BOOM ANGLE	JIB ANGLE OFFSET 5°	17°	30°
75°	6200	6000	5100
70°	6000	5000	4500
65°	5000	4500	4000
60°	3800	3500	3500
55°	3100	3000	3000
50°	2400	2300	2300
45°	1900	1800	1800
40°	1400	1300	1300
35°	1000	1000	1000

Jib Capacity Notes

1. Maximum jib load ratings are based on structural competence and do not exceed 85% of tipping load with fully extended outriggers. Use of outriggers is required when boom is equipped with a jib.

2. For bucket ratings on jib, deduct 20% from maximum jib load ratings.

3. **Warning:** Do not lift with jib at boom angles below 35°. Loss of stability occurs rapidly.

4. **Warning:** Do not exceed 101 foot operating radius with erected jib or a tipping condition will occur.

CHART 5

MAIN HOIST REEVING 5/8" DIA. 6 X 37 WIRE ROPE - EXTRA IMPROVED PLOW STEEL W/ I.W.R.C.- BREAKING STRENGTH: 41,200 lbs.								
PARTS OF LINE	1	2	3	4	5	6	7	8
MAXIMUM LOAD	8750	17,500	26,250	35,000	43,750	52,500	61,250	70,000

AUXILIARY HOIST REEVING 1/2" DIA. WIRE ROPE - 6 X 37 EXTRA IMPROVED PLOW STEEL W/ I.W.R.C. BREAKING STRENGTH: 26,600 lbs.								
PARTS OF LINE	1	2	3	4	5	6	7	8
MAXIMUM LOAD	6,200	12,400	18,600	24,800	31,000	37,200	43,400	49,600

On Rubber

Rated crane loads in pounds - minimum boom (72' maximum)

CHART 6

RATED LOADS FOR 16:00 X 25 - 24 PLY TIRES					LOAD RADIUS (FEET)	RATED LOADS FOR 20.5 X 25 - 20 PLY TIRES				
STATIONARY			CREEP	2 1/2 MPH		STATIONARY			CREEP	2 1/2 MPH
BOOM CENTERED OVER FRONT	±6° ARC OVER FRONT	360° ARC	BOOM CENTERED OVER FRONT			BOOM CENTERED OVER FRONT	±6° ARC OVER FRONT	360° ARC	BOOM CENTERED OVER FRONT	
44400	40400	24200	34700	28100	10	40000	36700	22300	31100	21700
38200	34500	18000	29700	23900	12	34400	31300	17400	26500	18300
30200	28000	12200	24100	19200	15	24700	24700	12200	21500	14500
16800	16800	7300	16800	14100	20	16100	16100	7300	15800	10300
11200	11200	4600	11200	10700	25	11500	11500	5000	11500	7600
8200	8200	3000	8200	8200	30	8300	8300	3200	8300	5700
6100	6100	2100	6100	6100	35	6000	6000	2100	6000	4400
4400	4400	1200	4400	4400	40	4500	4500	1400	4500	3200
3400	3400	-	3400	3400	45	3500	3500	-	3500	-
2500	2500	-	-	-	50	2500	2500	-	-	-
1800	1800	-	-	-	55	1800	1800	-	-	-

WARNING: Do not exceed maxim
with or without hook block, c
shown for each column,
ondition will occur.

Definitions:

1. Creep is motion for less than 200 ft. in a 30 minute period and not exceeding 1 mph.
2. Stability ratings do not exceed 75% of tipping loads.

Information:

1. Ratings above heavy line are based on structural competence and not on machine stability.
2. It is recommended that outriggers be extended as far as possible and clear of ground when lifting on rubber.

...nings:

1. When transporting a load, machine must be on firm, level surface with mechanical houselock engaged. The load must be centered over front of machine and restrained from swinging.
2. When swinging 360° load ratings, optional axle lockout override function must not be engaged.
3. On rubber lifting with boom extension or jib is not permitted.
4. Lift loads with minimum boom lengths, not to exceed 72 ft. when lifting on rubber.

Warning: Crane load ratings without outriggers depend on tire capacity and condition of tires, inflated per table.

§§§

CHART 7

Tire Inflation			
	Static and Creep	2 1/2 mph	Travel
16:00 x 25 - 24 ply tires	100 psi	95 psi	75 psi
20.5 x 25 - 20 ply tires	80 psi	65 psi	50 psi

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Operating Instructions

Warning: Operation of this machine in excess of rated loads, in areas of the chart not rated, or with disregard of instructions voids the machine warranty.

I. *Load radius* is the horizontal distance from the axis of rotation (before loading) to center of verticle hoist line (after loading). Actual working radii should be an accurate measurement.

2. Boom, lattice extension and jib point height dimensions are measured from ground to center of load sheave.

3. *Loaded boom angle* is the angle between the boom base section and the horizontal axis after lifting rated load at rated radius. loaded boom angles shown are with rated loads applied and provide an **approximation** of the *load radius* at the specified *boom length* (includes lattice extension). The boom angle before loading should be slightly greater to account for boom deflection.

4. Load ratings shown are for machine with counterweight as shown, leveled and standing on firm, uniform supporting surface. Ratings are based on freely suspended loads and, on outriggers, are not more that 85% of minimum tipping loads. Ratings above the bold horizontal line are based on machine's hydraulic or structural competence and not on machine stability (tipping conditions).

5. To determine *load ratings* in-between those shown on the chart, proceed as follows:

   a. for boom lengths not shown, use rating of next longer boom.
   b. for load radii not shown, use rating of next longer radius.

6. Deduct weight from *load ratings* of all suspended load handling devices such as hooks, hook blocks, slings, buckets, etc., as they are considered part of the load. See Chart No. 8 for deductions.

7. Deduct weight from *Load Ratings* of fixed boom attachments (jib, boom extension) either stowed or erected, as they reduce capacity of boom. See Chart No. 8 for deductions.

8. *Load Ratings* shown make no allowance for such factors as wind effect on lifted loads, ground conditions, out-of-level, operating speed or conditions that could be detrimental to safe operation of this machine. The operator must judge and reduce ratings accordingly.

9. *"With Outriggers" Load Ratings* are based on outriggers fully extended and set at a distance of 8 ft. 11 in. (2.72m) from the longitudinal axis of the carrier to the vertical axis of the outrigger float. Machine must be level and supported by outriggers with tires free of supporting surface.

10. *"Without Outriggers" Load Ratings* are based on lift limitations and conditions of tires inflated to pressures shown in Chart No. XX, and apply only when rear axle lockouts are`engaged. Over front *"Pick and Carry" ratings* are limited to travel speed less than2 1/2 mph (4 kmph) on firm, level ground with load centered over front of machine and load restrained from swinging.

11. Maximum *Jib Load Ratings* are based on structural competence. Ratings at any radius shall not exceed Boom Load Ratings at same radius and shall not exceed maximum ratings shown.

12. Jibs are intended to increase lifting height - not load radius. Maximum Jib Load Radius shall not exceed maximum Boom Load Radius of boom length on which jib is mounted.

13. Method of powered boom extension is hydraulically synchronous with each section extendible a distance of 24 ft. 0 in. (7.32m). Powered sectons resynchronize when boom is fully retracted or extended.

14. The maximum load which may be telescoped is limited by hydraulic pressure, boom angle and lubrication. It is safe to telescope any load within limits of load rating chart.

CHART 8°

Deductions to be made from Main Boom Rated Loads (in pounds)

Lattice Extension		Stowed	Erected
		550	1250
Jib		575	3300
Hook Block	On Boom Point	On Lattice Extension	On Jib
35 ton 4 sheave	425	-	-
10 ton 1 sheave	342	1875	-
8.5 ton ball hook	220	1650	4225

Deductions to be made from Lattice Extension Rated Loads (in pounds)

Jib		Stowed	Erected
		575	1250
Hook Block	On Boom Point	On Lattice Extension	On Jib
35 ton	325	425	-
10 ton	250	342	-
8.5 ton	175	220	1400

Deductions to be made fromJib Rated Loads (in pounds)

Hook Block	On Boom Point	On Lattice Extension	On Jib
35 ton	275	375	-
10 ton	225	300	-
8.5 ton	150	200	220

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