

TOWER CRANE CAPACITIES

3900T

**174' TO 194' OF NO. 9A TOWER WITH NO. 18 BOOM
61,200 LB. CRANE COUNTERWEIGHT**

**CAUTION OUTSIDE
ASSIST REQUIRED**

SERIES-2

RATING OVER SIDE OR REAR ON EXTENDED OUTRIGGERS

TRUCK CRANE

LIFTING CAPACITIES: Capacities for various tower lengths, boom lengths and operating radii are for freely suspended loads and do not exceed **75%** of a static tipping load. **CAPACITIES BASED ON STRUCTURAL COMPETENCE ARE SHOWN BY SHADED AREAS.**

Capacities are shown in pounds. Weight of jib, (see chart A) all load blocks, hooks, weight ball, slings, hoist lines, etc., beneath boom and jib point sheaves, is considered part of the main boom load. Boom is not to be lowered beyond radii where combined weights are greater than rated capacity. Where no capacity is shown, operation is not intended or approved. **CAPACITY INDICATED BY "B" REPRESENTS A BOOM POSITION WHICH REQUIRES LOAD HANDLING DEVICES OF AT LEAST 2,000 POUNDS TO PREVENT BOOM FROM COMING BACK AGAINST BOOM STOP AS LOAD IS RELEASED.**

OPERATING CONDITIONS: Machine to operate on a firm surface with outriggers fully extended and roller path level within a tolerance of 1/4" in 10 ft. and properly supported. Refer to rigging No. 65136 and No. 66015, load line specification chart No. 5327, operating range diagram chart No. 6423-A and chart No. 6631-A for recommended procedure for operating under various wind conditions. **CAUTION: OUTSIDE ASSIST REQUIRED. SEE CHART NO. 6484 FOR TOWER AND BOOM RAISING PROCEDURE.**

Crane operator judgment must be used to allow for dynamic load effects of swinging, hoisting or lowering, wind conditions, as well as adverse operating conditions and physical machine depreciation.

OPERATING RADIUS: Operating radius is the horizontal distance from the axis of rotation to the center of vertical hoist line or load block. Add 12" to boom point radius for radius of sheave when using single part hoist line.

Boom angle is the angle between horizontal and centerline of boom butt and inserts and is an indication of operating radius. In all cases, operating radius shall govern capacity.

BOOM POINT ELEVATION: Boom point elevation, in feet, is the vertical distance from ground level to centerline of boom point shaft. Distances are given for 194' tower. Deduct 10' for each 10' reduction in tower height.

MACHINE EQUIPMENT: Machine equipped with Manitowoc-Hendrickson 12 x 6 carrier, 226" wheelbase, 10,500 lb. front bumper ctwt., 112" outriggers or Manitowoc-Pierce 10 x 6 carrier, 258.5" wheelbase, 5,300 lb. front bumper ctwt., 112" outriggers or Consolidated Dynamics 12 x 6 carrier, model 12615, 235" wheelbase, 5,500 lb. front bumper ctwt., 115" outriggers. Machine also equipped with 15' retractable gantry, 10 part boom hoist reeving, four 1-1/4" tower pendants, two 1-1/4" boom pendants, two 7/8" intermediate suspension pendants as specified on rigging drawing, 61,200 lb. 2 piece crane ctwt.

LOAD AND WHIP LINE SPECIFICATIONS	
LOAD LINE: 1" — 6x25 Filler Wire, Improved Plow Steel, Regular Lay, IWRC. Minimum Breaking Strength 44.9 Ton. Maximum Load = 22,500 Lbs. Per Line. (Approx. Weight Per Ft. in Lbs. 1.85)	
WHIP LINE: 1" — 6x25 Filler Wire, Improved Plow Steel, Regular Lay, IWRC. Minimum Breaking Strength 44.9 Ton. Maximum Load = 22,500 Lbs. Per Line. (Approx. Weight Per Ft. in Lbs. 1.85)	

(A) DEDUCT FROM CAPACITIES WHEN JIB IS ATTACHED	
Jib Length	Jib No. 124
30'	2,000 Lb.
40'	2,400 Lb.
50'	2,800 Lb.
60'	3,200 Lb.
Load block, hook & weight ball on ground until tower is in vertical position and boom is in operating range. Jib to be attached with tower in vertical position and with boom in a position which will allow jib to be attached.	

For jib capacities, consult jib chart.

Boom Lgth.: Feet	Oper. Rad.: Feet	Boom Ang.: Deg.	Boom Point: Elev.	Capacity:	Boom Lgth.: Feet	Oper. Rad.: Feet	Boom Ang.: Deg.	Boom Point: Elev.	Capacity:	Boom Lgth.: Feet	Oper. Rad.: Feet	Boom Ang.: Deg.	Boom Point: Elev.	Capacity:	Boom Lgth.: Feet	Oper. Rad.: Feet	Boom Ang.: Deg.	Boom Point: Elev.	Capacity:
100	40	68.7	294.9	36,000B	100	40	72.4	316.1	30,700	140	45	72.8	335.5	25,300	150	45	74.0	345.9	22,600
	45	65.6	292.8	34,800		45	69.8	314.4	29,800		50	70.7	333.9	24,600		50	72.0	344.4	21,800
	50	62.4	290.4	33,300		50	67.3	312.4	28,900		55	68.5	332.0	23,800		55	70.0	342.7	20,900
	55	59.1	287.6	31,700		55	64.7	310.2	28,000		60	66.3	329.9	23,100		60	67.9	340.8	20,100
	60	55.7	284.4	29,000		60	62.0	307.7	27,200		65	64.0	327.6	22,300		65	65.8	338.6	19,200
110	65	52.1	280.7	26,900	110	65	59.2	304.9	26,300	150	70	61.7	325.0	21,500	160	70	63.7	336.3	18,400
	70	48.4	276.6	25,100		70	56.4	301.7	24,400		75	59.3	322.2	20,700		75	61.6	333.7	17,600
	75	44.5	271.8	23,800		75	53.5	298.2	22,800		80	56.9	319.1	20,000		80	59.4	330.9	16,800
	80	40.2	266.3	22,700		80	50.5	294.3	21,300		85	54.5	315.7	19,200		85	57.1	327.8	16,000
	85	35.5	259.9	22,000		85	47.3	290.0	20,200		90	51.9	311.9	18,100		90	54.8	324.4	15,200
120	90	30.3	252.2	21,200	120	90	44.0	285.1	19,300	160	95	49.3	307.8	17,100	170	95	52.5	320.7	14,500
	95	24.0	242.4	19,800		95	40.4	279.5	18,500		100	46.5	303.3	16,200		100	50.0	316.7	13,800
	100	15.5	228.4	18,600		100	36.6	273.3	18,000		105	43.6	298.3	15,400		105	47.5	312.3	13,100
						105	32.4	266.0	17,000		110	40.6	292.8	14,900		110	44.8	307.5	12,500
						110	27.6	257.3	16,000		115	37.3	286.6	14,400		115	42.1	302.2	11,900
130	40	70.7	305.6	33,000B	130	115	21.9	246.4	15,100	170	120	33.8	279.6	13,700	180	120	39.1	296.4	11,300
	45	67.9	303.7	32,100		120	14.1	231.0	14,300		125	29.9	271.5	13,100		125	36.0	289.9	10,700
	50	65.1	301.5	31,100		40	73.8	326.6	28,200		130	25.5	262.0	12,400		130	32.6	282.6	10,100
	55	62.2	299.0	30,100		45	71.4	325.0	27,400		135	20.2	250.1	11,700		135	28.9	274.2	9,600
	60	59.2	296.2	29,200		50	69.1	323.2	26,600		140	13.1	233.4	11,100		140	24.6	264.2	9,100
140	65	56.1	293.0	26,800	140	55	66.7	321.2	25,700	180	145	19.5	251.9	8,700	190	145	19.5	251.9	8,700
	70	52.9	289.5	24,900		60	64.3	318.9	25,000		150	12.6	234.5	8,500		150	12.6	234.5	8,500
	75	49.5	285.5	23,200		65	61.8	316.4	24,100										
	80	46.0	280.9	21,900		70	59.3	313.5	23,300										
	85	42.3	275.8	20,800		75	56.7	310.4	22,300										
150	90	38.3	269.9	20,000	150	80	54.0	307.0	20,800	190					190				
	95	33.8	263.0	19,500		85	51.2	303.1	19,500										
	100	28.8	254.8	18,300		90	48.4	298.9	18,400										
	105	22.8	244.5	17,200		95	45.3	294.2	17,500										
	110	14.8	229.8	16,300		100	42.2	289.0	16,800										
						105	38.8	283.1	16,100										
						110	35.1	276.5	15,800										
						115	31.0	268.8	14,900										
						120	26.5	259.7	14,100										
						125	21.0	248.3	13,300										
						130	13.6	232.2	12,600										

Combined From Charts:
No. 6769-B 8-16-84
No. 5327 3-21-80

Operating Range Diagram
continued on reverse side.

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OPERATING RANGE DIAGRAM 3900T

RATING OVER SIDE OR REAR AND FRONT ON EXTENDED OUTRIGGERS

TRUCK CRANE

Approved working area is shown in the following diagram for boom chart capacities and jib chart capacities over side or rear and boom over front.

shown on the capacity charts.

Operating outside the working area is not intended or approved.

Lifting is approved only in this area for which ratings are

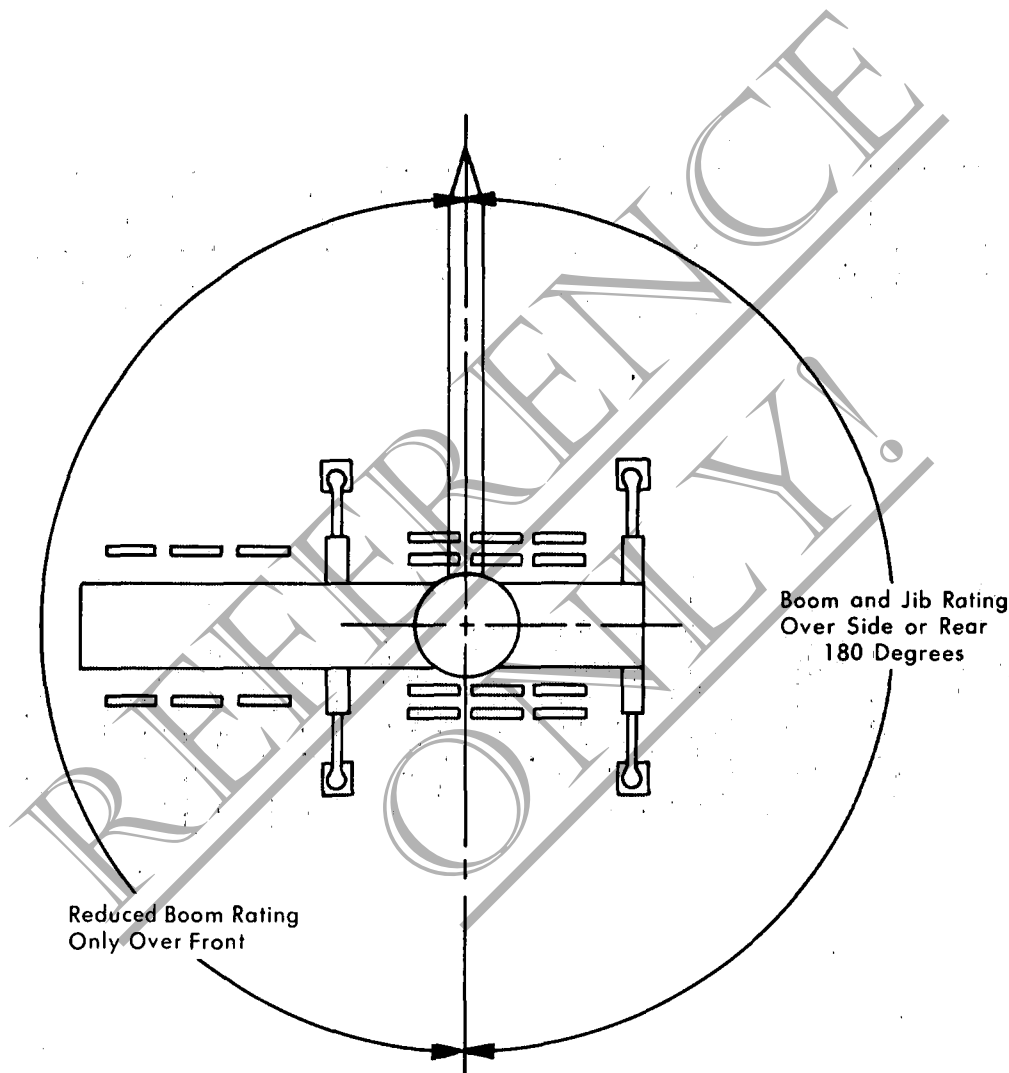


DIAGRAM OF BOOM AND JIB
OPERATING RANGE OVER SIDE AND REAR
AND BOOM OVER FRONT

(Ref. Drwg. No. 6423-A)