



Load Rating Chart

Model 124SX

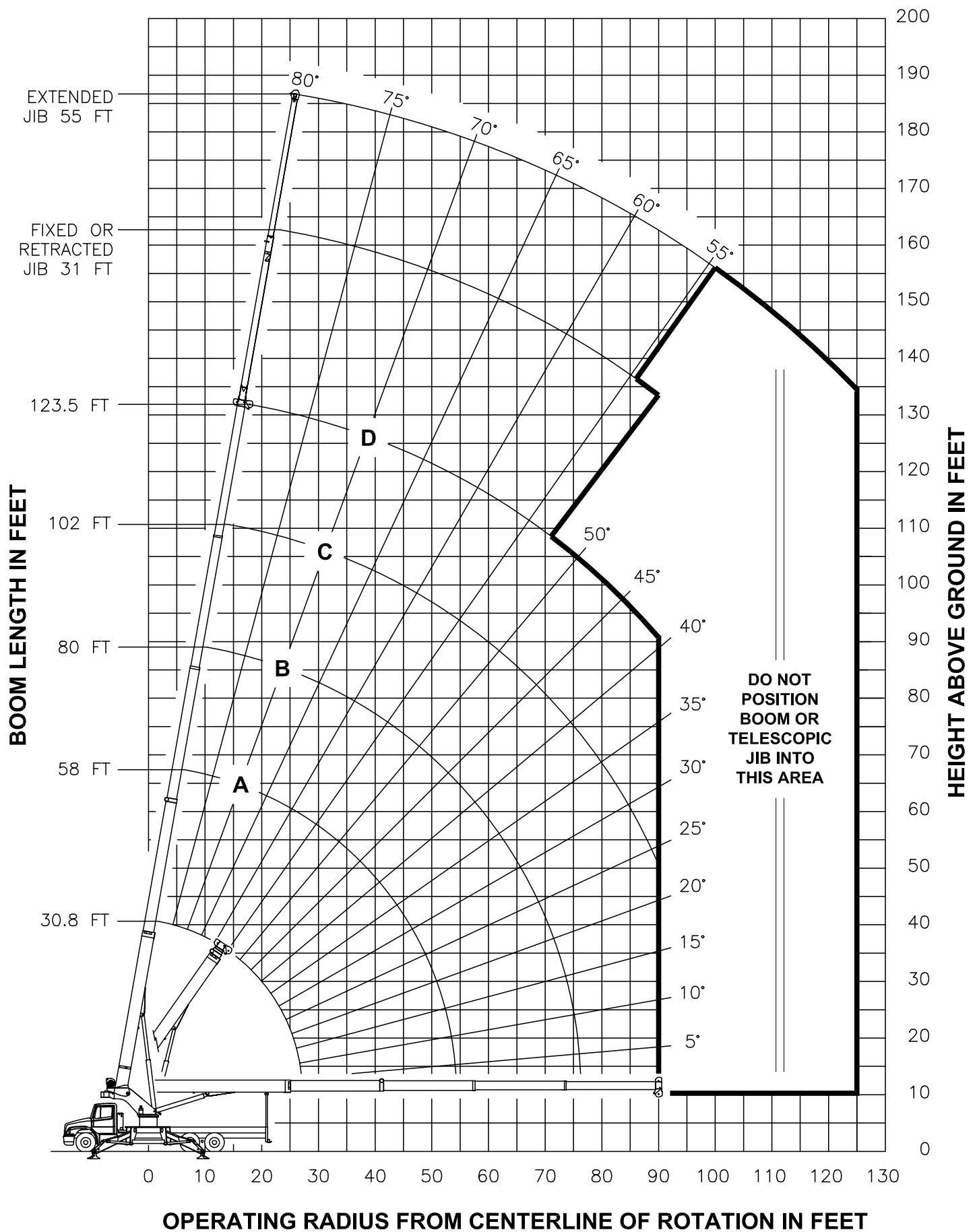


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NOTE: Additional copies of this Load Rating Chart can be purchased from your Manitex Distributor. When ordering, use the part number shown in the bottom left corner of this page.



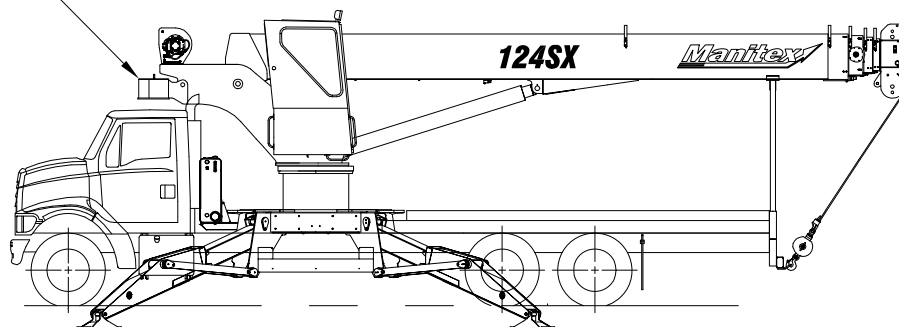
RANGE DIAGRAM - WITH COUNTERWEIGHT INSTALLED -



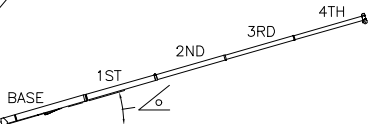


COUNTERWEIGHT
MUST BE
INSTALLED FOR
THIS LOAD CHART

**USE THIS CHART ONLY
WHEN COUNTERWEIGHT
IS INSTALLED**

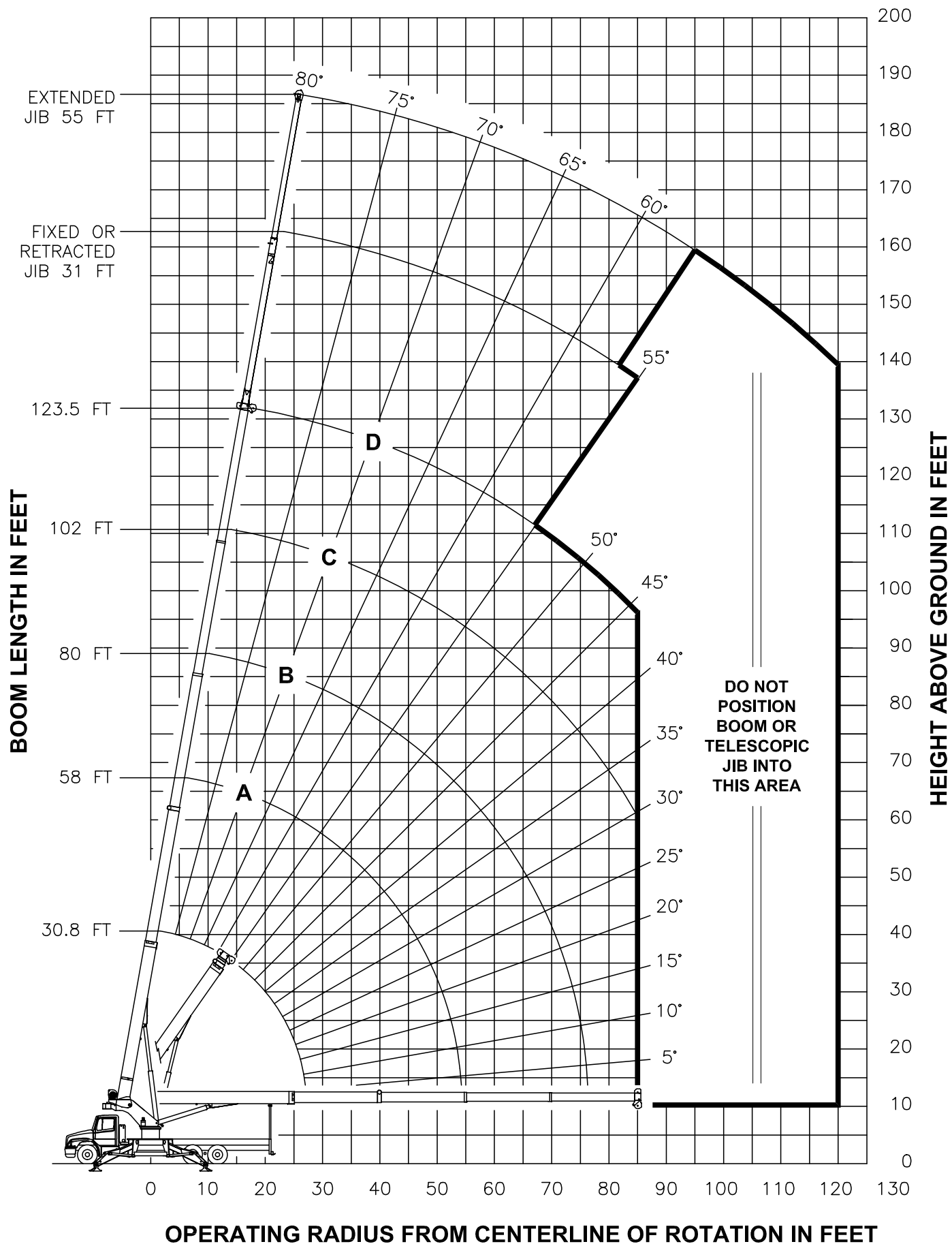


- LOAD CHART WITH COUNTERWEIGHT INSTALLED -

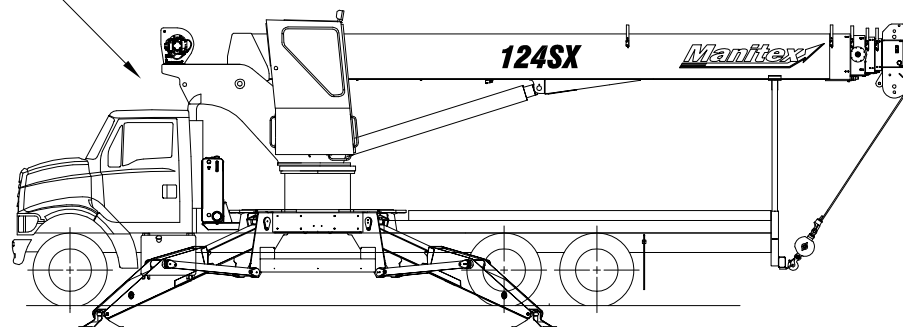
LOAD RATINGS IN LBS WITH ALL OUTRIGGERS FULLY EXTENDED LMI CODE #1										JIB LOAD RATINGS IN LBS WITH ALL OUTRIGGERS FULLY EXTENDED							
OPERATING RADIUS FT	LOADED BOOM ANGLE BOOM LENGTH AND MARKER 									OPERATING RADIUS FT	FIXED JIB		TELESCOPIC JIB				
	LMI CODE #2										LMI CODE #3		LMI CODE #4				
	JIB LENGTH FOR ALL BOOM LENGTHS										JIB LENGTH FOR ALL BOOM LENGTHS		JIB LENGTH FOR ALL BOOM LENGTHS				
	SEE WARNING NOTE 4										SEE WARNING NOTE 4		SEE WARNING NOTE 4				
	30.83 FT	A		B		C		D			BOOM AN G	JIB LENGTH FOR ALL BOOM LENGTHS	BOOM AN G	JIB LENGTH FOR ALL BOOM LENGTHS	BOOM AN G	JIB LENGTH FOR ALL BOOM LENGTHS	
	°		°		°		°		°		°		°		°		
5	75	60000															
8	69	46500															
10	64	40000															
12	60	35000	75	25000													
15	53	29000	73	25000	79	21500											
20	40	22130	67	22740	75	19700	80	14500									
25	22	16330	62	17250	71	17460	77	13500	80	8450							
30			56	13430	67	13650	74	12820	78	8150	30	80	4000	79.5	3300		
35			49	10700	63	10920	71	11020	75	7800	35	78	3850	77.5	3300	79.5	2450
40			42	8640	59	8870	68	8980	72	7280	40	76	3700	76	3300	78	2450
45			34	7030	54	7280	65	7390	70	6780	45	74	3550	74	3300	76.5	2450
50			23	5730	50	6000	61	6110	67	6160	50	72	3400	72	3300	75	2450
55					44	4880	58	5020	65	5090	55	70	3250	70.5	3300	73	2450
60					39	3920	54	4050	62	4120	60	68	3080	68.5	3300	71.5	2450
65					32	3120	50	3260	59	3330	65	66	2910	66.5	3070	70	2420
70					24	2450	46	2600	56	2680	70	64	2750	64.5	2510	68	2260
75					12	1870	42	2050	53	2120	75	62	2540	62	1940	66	2110
80							37	1560	50	1640	80	60	2060	60	1460	64.5	1940
85							32	1150	47	1230	85	58	1640	58	1040	63	1750
90							25	780	43	860	90	55	1270	55.5	670	61	1370
95											95	53	950			59	1040
100											100	51	660			57	750
			</														



RANGE DIAGRAM - WITHOUT COUNTERWEIGHT -

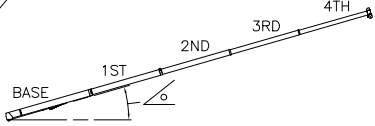


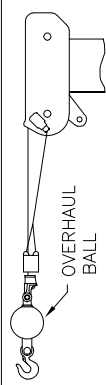
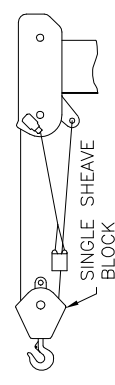
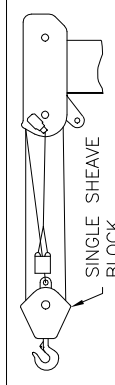
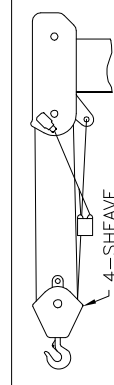
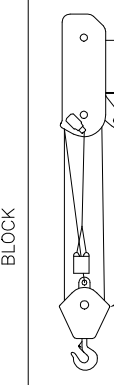
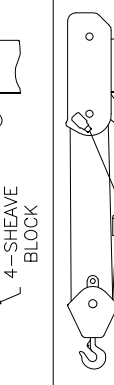
COUNTERWEIGHT
MUST BE
REMOVED FOR
THIS LOAD CHART



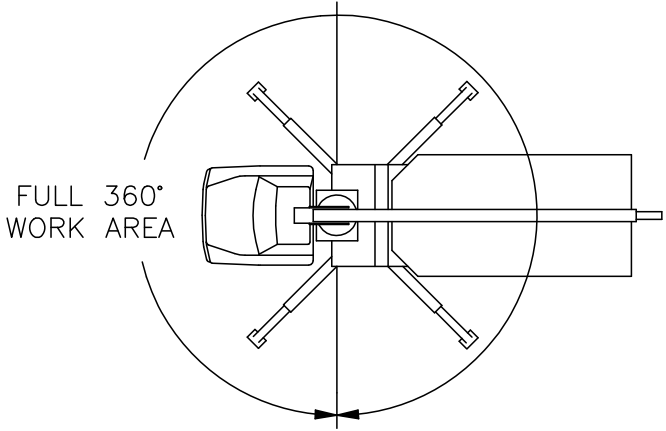
USE THIS CHART WHEN COUNTERWEIGHT IS REMOVED

- LOAD CHART WITHOUT COUNTERWEIGHT -

LOAD RATINGS IN LBS WITH ALL OUTRIGGERS FULLY EXTENDED LMI CODE #16										JIB LOAD RATINGS IN LBS WITH ALL OUTRIGGERS FULLY EXTENDED							
OPERATING RADIUS FT	LOADED BOOM ANGLE BOOM LENGTH AND MARKER 										OPERATING RADIUS FT	FIXED JIB		TELESCOPIC JIB			
	LMI CODE #17											LMI CODE #18		LMI CODE #19			
	BOOM LOAD ANG		JIB LENGTH FOR ALL BOOM LENGTHS SEE WARNING NOTE 4		BOOM LOAD ANG		JIB LENGTH FOR ALL BOOM LENGTHS SEE WARNING NOTE 4		BOOM LOAD ANG			JIB LENGTH FOR ALL BOOM LENGTHS SEE WARNING NOTE 4					
	°	30.83 FT	°	58 FT	°	80 FT	°	102 FT	°	123.5 FT		°	31 FT	°	30.5 FT	°	55 FT
5	75	60000															
8	69	46500															
10	64	40000															
12	60	35000	75	25000													
15	53	29000	73	25000	79	21500											
20	40	22130	67	22740	75	19700	80	14500									
25	22	16330	62	17250	71	17460	77	13500	80	8450							
30			56	13430	67	13650	74	12820	78	8150	30	80	4000	79.5	3300		
35			49	10700	63	10920	71	11020	75	7800	35	78	3850	77.5	3300	79.5	2450
40			42	8270	59	8560	68	8700	72	7280	40	76	3700	76	3300	78	2450
45			34	6370	54	6660	65	6790	70	6780	45	74	3550	74	3300	76.5	2450
50			23	4930	50	5230	61	5370	67	5440	50	72	3400	72	3300	75	2450
55					44	4120	58	4260	65	4330	55	70	3250	70.5	3300	73	2450
60					39	3230	54	3370	62	3440	60	68	3080	68.5	3300	71.5	2450
65					32	2500	50	2640	59	2710	65	66	2910	66.5	2560	70	2420
70					24	1880	46	2030	56	2110	70	64	2540	64.5	1940	68	2260
75					12	1340	42	1520	53	1590	75	62	2020	62	1420	66	2110
80							37	1080	50	1150	80	60	1570	60	970	64.5	1690
85							32	690	47	770	85	58	1180	58	580	63	1290
90											90	55	840			61	950
95											95					59	640
	450 LBS		240 LBS		180 LBS		140 LBS		120 LBS		FIXED		DEDUCTIONS FOR STOWED JIB				
	840 LBS		450 LBS		330 LBS		260 LBS		210 LBS		TELESCOPIC						

ALLOWABLE LINE PULL							WARNING
1 PART LINE	2 PART LINE	3 PART LINE	4 PART LINE	5 PART LINE	6 PART LINE	7 PART LINE	
							
9500 LBS	19000 LBS	28500 LBS	38000 LBS	47500 LBS	57000 LBS	60000 LBS	
10000 LBS	20000 LBS	30000 LBS	40000 LBS	50000 LBS	60000 LBS	60000 LBS	ANTI-TWO-BLOCK SYSTEM MUST BE IN GOOD OPERATING CONDITION BEFORE OPERATING CRANE. REFER TO THE OWNER'S MANUAL. KEEP AT LEAST 3 WRAPS OF LOAD LINE ON THE DRUM AT ALL TIMES.
							5/8" ROT RESISTANT (5.0:1 SF) – 47500 LBS MIN BREAKING STRENGTH
							5/8" 6 X 25 IWRC (3.5:1 SF) – 35000 LBS MIN BREAKING STRENGTH

AREA OF OPERATION



DEDUCTIONS FROM RATED LOADS FOR LOAD HANDLING DEVICES SUPPLIED BY MANITEX

- AUXILIARY BLOCK ————— 50 LBS
- OVERHAUL BALL ————— SEE OVERHAUL BALL MANUFACTURER NAMEPLATE
- LOAD BLOCK ————— SEE BLOCK MANUFACTURER NAMEPLATE
- SWING AROUND JIB (STOWED) ————— SEE LOAD CHART

**LMI OPERATING CODES WITH COUNTERWEIGHT INSTALLED**

SETTING	CRANE CONFIGURATION	CWT CONFIGURATION
#1	— MAIN BOOM — — — — —	INSTALLED
#2	— FIXED JIB — — — — —	INSTALLED
#3	— TELESCOPIC JIB—RETRACTED — — — — —	INSTALLED
#4	— TELESCOPIC JIB—EXTENDED — — — — —	INSTALLED
#5	— PERSONNEL LIFTING PLATFORM ON MAIN BOOM — — — — —	INSTALLED
#6	— PERSONNEL LIFTING PLATFORM ON FIXED JIB — — — — —	INSTALLED
#7	— PERSONNEL LIFTING PLATFORM ON TELESCOPIC JIB—RETRACTED — — —	INSTALLED
#8	— PERSONNEL LIFTING PLATFORM ON TELESCOPIC JIB—EXTENDED — — —	INSTALLED

LMI OPERATING CODES WITHOUT COUNTERWEIGHT

SETTING	CRANE CONFIGURATION	CWT CONFIGURATION
#16	— MAIN BOOM — — — — —	REMOVED
#17	— FIXED JIB — — — — —	REMOVED
#18	— TELESCOPIC JIB—RETRACTED — — — — —	REMOVED
#19	— TELESCOPIC JIB—EXTENDED — — — — —	REMOVED
#20	— PERSONNEL LIFTING PLATFORM ON MAIN BOOM — — — — —	REMOVED
#21	— PERSONNEL LIFTING PLATFORM ON FIXED JIB — — — — —	REMOVED
#22	— PERSONNEL LIFTING PLATFORM ON TELESCOPIC JIB—RETRACTED — — —	REMOVED
#23	— PERSONNEL LIFTING PLATFORM ON TELESCOPIC JIB—EXTENDED — — —	REMOVED

WARNING

1. THE OPERATOR MUST READ AND UNDERSTAND THE OWNER'S MANUAL BEFORE OPERATING THIS CRANE.
2. POSITIONING OR OPERATION OF CRANE BEYOND AREAS SHOWN ON THIS CHART IS NOT INTENDED OR APPROVED EXCEPT WHERE SPECIFIED IN OWNER'S MANUAL.
3. LOADED BOOM ANGLES AT SPECIFIED BOOM LENGTHS GIVE ONLY AN APPROXIMATION OF THE OPERATING RADIUS. THE BOOM ANGLE BEFORE LOADING SHOULD BE GREATER TO ACCOUNT FOR DEFLECTIONS. DO NOT EXCEED THE OPERATING RADIUS FOR RATED LOADS.
4. THE OPERATING RADIUS SHOWN IN THE JIB RATING CHART IS FOR FULLY EXTENDED BOOM ONLY. WHEN BOOM IS NOT FULLY EXTENDED, USE ONLY LOADED BOOM ANGLE TO DETERMINE LOAD RATING OF JIB.
5. FOR BOOM ANGLES NOT SHOWN ON JIB LOAD RATING CHART, USE RATING OF NEXT LOWER BOOM ANGLE.
6. FOR BOOM LENGTHS NOT SHOWN, USE RATING OF NEXT SHORTER OR LONGER BOOM LENGTH, WHICHEVER IS LESS. FOR RADII NOT SHOWN, USE RATING OF NEXT LONGER RADIUS.
7. CRANE LOAD RATINGS ON OUTRIGGERS ARE BASED ON FREELY SUSPENDED LOADS WITH THE MACHINE LEVELED AND STANDING ON A FIRM UNIFORM SUPPORTING SURFACE. NO ATTEMPT SHALL BE MADE TO MOVE A LOAD HORIZONTALLY ON THE GROUND IN ANY DIRECTION.



WARNING (CONTINUED)

8. PRACTICAL WORKING LOADS DEPEND ON SUPPORTING SURFACE, WIND, AND OTHER FACTORS AFFECTING STABILITY SUCH AS HAZARDOUS SURROUNDINGS, EXPERIENCE OF PERSONNEL, AND PROPER HANDLING, ALL OF WHICH MUST BE TAKEN INTO ACCOUNT BY THE OPERATOR.
9. THE MAXIMUM LOAD WHICH MAY BE TELESKOPED IS LIMITED BY HYDRAULIC PRESSURE, BOOM ANGLE, AND BOOM LUBRICATION. IT IS SAFE TO ATTEMPT TO TELESKOPE ANY LOAD WITHIN THE LIMITS OF THE LOAD RATING CHART.
10. LIFTING OFF THE MAIN BOOM POINT WHILE THE SWING AROUND JIB IS ERECTED IS NOT INTENDED OR APPROVED.

INFORMATION

1. DEDUCTIONS MUST BE MADE FROM RATED LOADS FOR STOWED JIB, OPTIONAL ATTACHMENTS, HOOKS, AND LOADBLOCKS (SEE DEDUCTION CHART). WEIGHTS OF SLINGS AND ALL OTHER LOAD HANDLING DEVICES SHALL BE CONSIDERED A PART OF THE LOAD.
2. LOAD RATINGS ABOVE THE HEAVY LINE ARE STRUCTURALLY LIMITED CAPACITIES. LOAD RATINGS BELOW THE HEAVY LINE ARE STABILITY LIMITED CAPACITIES AND DO NOT EXCEED 85% OF TIPPING.

DEFINITIONS

1. OPERATING RADIUS IS THE HORIZONTAL DISTANCE FROM THE AXIS OF ROTATION TO THE CENTER OF THE VERTICAL HOIST LINE OR TACKLE WITH LOAD APPLIED.
2. LOADED BOOM ANGLE AS SHOWN IN THE COLUMN HEADED BY $\angle$, IS THE INCLUDED ANGLE BETWEEN THE HORIZONTAL AND LONGITUDINAL AXES OF THE BOOM BASE AFTER LIFTING RATED LOAD AT RATED RADIUS.