

# Load Rating Chart

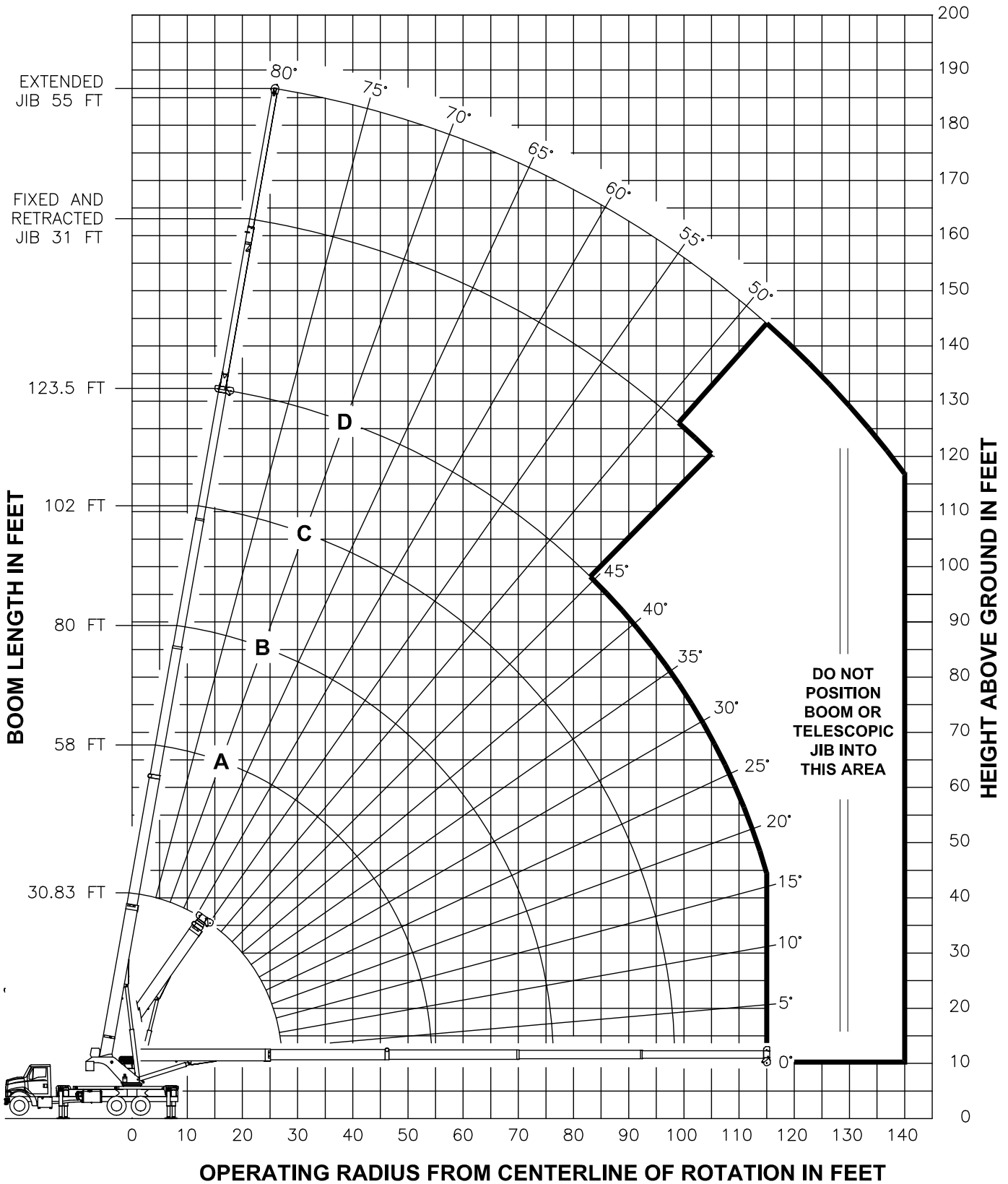
## *Model 40124SHL*



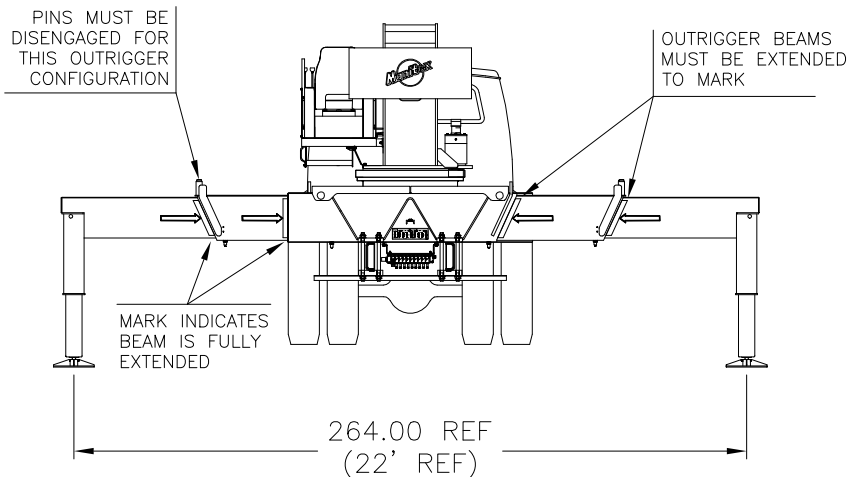
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**NOTE:** Additional copies of this Load Rating Chart can be purchased from your Manitex Distributor. When ordering, use the part number shown in the bottom left corner of this page.

### RANGE DIAGRAM - FULLY EXTENDED OUTRIGGER CONFIGURATION -



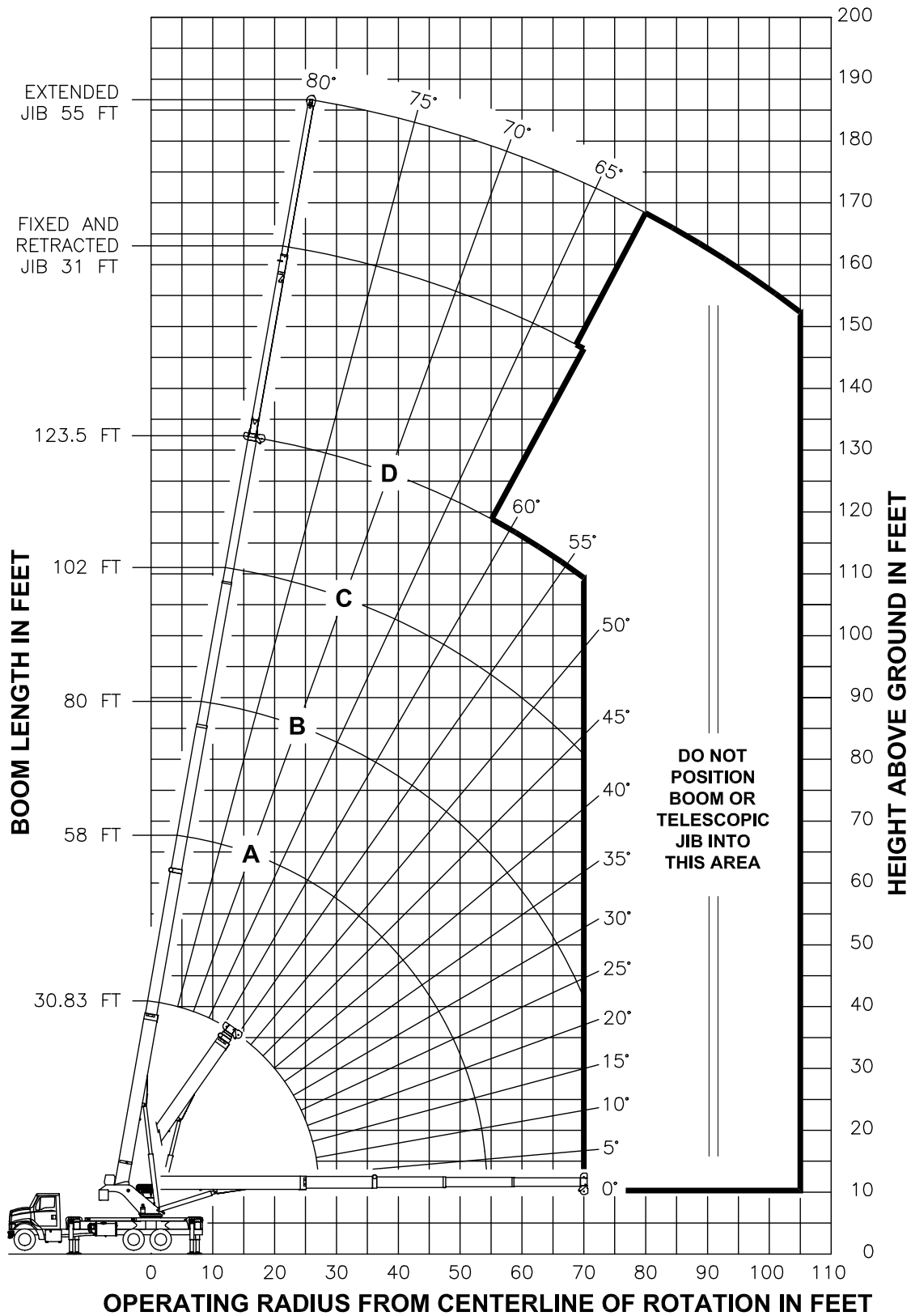
**USE THIS CHART ONLY  
WHEN ALL  
OUTRIGGERS ARE  
FULLY EXTENDED**



**- FULLY EXTENDED OUTRIGGER CONFIGURATION -**

LOAD RATINGS IN LBS WITH ALL OUTRIGGERS FULLY EXTENDED LMI CODE #1										JIB LOAD RATINGS IN LBS WITH ALL OUTRIGGERS FULLY EXTENDED										
OPERATING HEIGHT	LOADED BOOM ANGLE BOOM LENGTH AND MARKER		A				B		C		D		FIXED JIB		TELESCOPIC JIB					
			LMI CODE #2		LMI CODE #3		LMI CODE #4		LMI CODE #2		LMI CODE #3		LMI CODE #4		LMI CODE #2		LMI CODE #3		LMI CODE #4	
			BOOM ANGLE	JIB LENGTH FOR ALL BOOM LENGTHS	BOOM ANGLE	JIB LENGTH FOR ALL BOOM LENGTHS	BOOM ANGLE	JIB LENGTH FOR ALL BOOM LENGTHS	BOOM ANGLE	JIB LENGTH FOR ALL BOOM LENGTHS	BOOM ANGLE	JIB LENGTH FOR ALL BOOM LENGTHS	BOOM ANGLE	JIB LENGTH FOR ALL BOOM LENGTHS	BOOM ANGLE	JIB LENGTH FOR ALL BOOM LENGTHS	BOOM ANGLE	JIB LENGTH FOR ALL BOOM LENGTHS	BOOM ANGLE	JIB LENGTH FOR ALL BOOM LENGTHS
	30.83 FT	58 FT	80 FT	102 FT	123.5 FT															
5	75	80000																		
8	69	60500																		
10	64	52550																		
12	60	46600	75	25000																
15	53	39600	73	25000	79	21500														
20	40	31330	67	25000	75	19700	80	14500												
25	22	24100	62	22840	71	18200	77	13500	80	8450										
30			56	19550	67	16250	74	12820	78	8150	30	80	4000	79.5	3300					
35			49	16100	63	14540	71	11380	75	7800	35	78	3850	77.5	3300	79.5	2450			
40			42	12900	59	13070	68	10160	72	7280	40	76	3700	76	3300	78	2450			
45			34	10540	54	10800	65	9370	70	6780	45	74	3550	74	3300	76.5	2450			
50			23	8720	50	9000	61	8430	67	6160	50	72	3400	72	3300	75	2450			
55					44	7570	58	7620	65	5540	55	70	3250	70.5	3300	73	2450			
60					39	6400	54	6530	62	5000	60	68	3080	68.5	3300	71.5	2450			
65					32	5430	50	5570	59	4520	65	66	2910	66.5	3070	70	2420			
70					24	4610	46	4760	56	4090	70	64	2750	64.5	2750	68	2260			
75					12	3900	42	4060	53	3700	75	62	2600	62	2380	66	2110			
80							37	3470	50	3350	80	60	2460	60	2050	64.5	1940			
85							32	2940	47	3020	85	58	2320	58	1760	63	1750			
90							25	2480	43	2560	90	55	2170	55.5	1500	61	1580			
95							17	2060	40	2150	95	53	1930	53	1260	59	1440			
100									35	1790	100	51	1720	50.5	1050	57	1280			
105									31	1460	105	48	1530	48	850	55	1100			
110									25	1160	110	45	1350			53	930			
115									18	880	115	43	1200			51	770			
120											120	40	1020							
125											125	36	800							
			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								

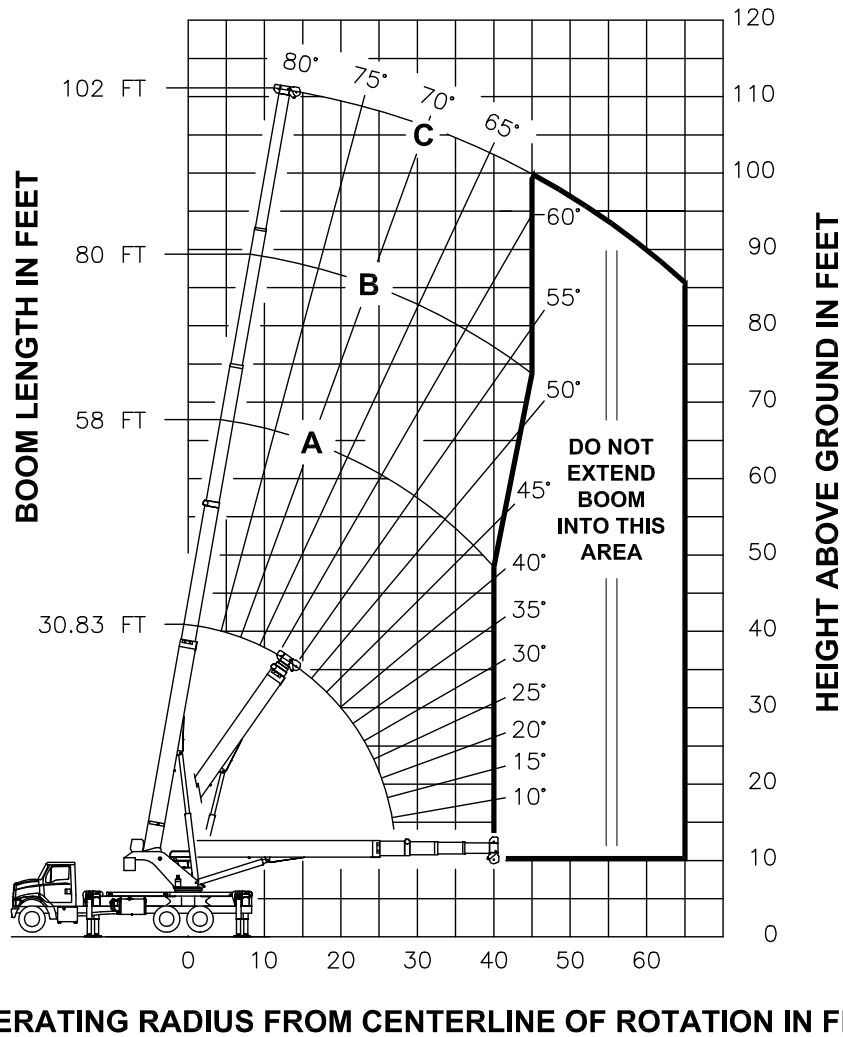
# RANGE DIAGRAM - INTERMEDIATE OUTRIGGER CONFIGURATION -



**NOTE :** LIFTING PERSONNEL WITH CRANE IN THIS OUTRIGGER CONFIGURATION IS STRICTLY PROHIBITED. USE ONLY FULLY EXTENDED OUTRIGGER CONFIGURATION WHEN LIFTING PERSONNEL.



## RANGE DIAGRAM - FULLY RETRACTED OUTRIGGER CONFIGURATION -



**NOTE :** LIFTING PERSONNEL WITH CRANE IN THIS OUTRIGGER CONFIGURATION IS STRICTLY PROHIBITED. USE ONLY FULLY EXTENDED OUTRIGGER CONFIGURATION WHEN LIFTING PERSONNEL.

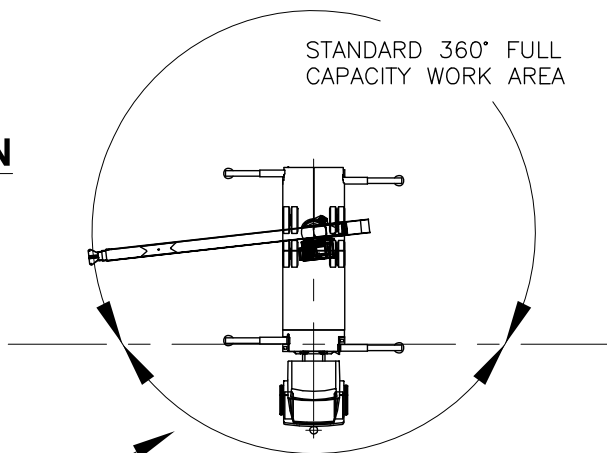


<b>ALLOWABLE LINE PULL</b>								<b>WARNING</b>
1 PART LINE	2 PART LINE	3 PART LINE	4 PART LINE	5 PART LINE	6 PART LINE	7 PART LINE	8 PART LINE	
								ANTI-TWO-BLOCK SYSTEM MUST BE IN GOOD OPERATING CONDITION BEFORE OPERATING CRANE.  REFER TO THE OWNER'S MANUAL.  KEEP AT LEAST 3 WRAPS OF LEAD LINE ON THE DRUM AT ALL TIMES.
9500 LBS	19000 LBS	28500 LBS	38000 LBS	47500 LBS	57000 LBS	66500 LBS	76000 LBS	5/8" ROT RESISTANT (5.0:1 SF) – 47500 LBS MIN BREAKING STRENGTH
10000 LBS	20000 LBS	30000 LBS	40000 LBS	50000 LBS	60000 LBS	70000 LBS	80000 LBS	5/8" 6 X 25 IWRC (3.5:1 SF) – 35000 LBS MIN BREAKING STRENGTH

**AREA OF OPERATION**

**WARNING:**

THE MACHINE MUST BE LEVEL AND THE FRONT BUMPER STABILIZER MUST BE SET WHEN OPERATING IN THIS AREA.



**DEDUCTIONS FROM RATED LOADS FOR LOAD HANDLING DEVICES SUPPLIED BY MANITEX**

- AUXILIARY BLOCK ----- 50 LBS
- OVERHAUL BALL ----- SEE OVERHAUL BALL MFRG. NAMEPLATE
- LOAD BLOCK ----- SEE LOADBLOCK MFRG. NAMEPLATE
- HOSE REEL ----- 260 LBS
- SWING AROUND JIBS (STOWED) ----- SEE LOAD CHART



**LMI OPERATING CODES**

SETTING	CRANE CONFIGURATION	OUTRIGGER CONFIGURATION
#1	— MAIN BOOM	FULLY EXTENDED
#2	— FIXED JIB	FULLY EXTENDED
#3	— TELESCOPIC JIB—RETRACTED	FULLY EXTENDED
#4	— TELESCOPIC JIB—EXTENDED	FULLY EXTENDED
#5	— PERSONNEL LIFTING PLATFORM ON MAIN BOOM	FULLY EXTENDED
#6	— PERSONNEL LIFTING PLATFORM ON FIXED JIB	FULLY EXTENDED
#7	— PERSONNEL LIFTING PLATFORM ON TELESCOPIC JIB—RETRACTED	FULLY EXTENDED
#8	— PERSONNEL LIFTING PLATFORM ON TELESCOPIC JIB—EXTENDED	FULLY EXTENDED
#9	— MAIN BOOM	INTERMEDIATE
#10	— FIXED JIB	INTERMEDIATE
#11	— TELESCOPIC JIB—RETRACTED	INTERMEDIATE
#12	— TELESCOPIC JIB—EXTENDED	INTERMEDIATE
#13	— MAIN BOOM	FULLY RETRACTED

**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 TELESCOPED IS LIMITED BY HYDRAULIC PRESSURE, BOOM ANGLE, AND BOOM LUBRICATION. IT IS SAFE TO ATTEMPT TO TELESCOPE 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 LOAD BLOCKS (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 , IS THE INCLUDED ANGLE BETWEEN THE HORIZONTAL AND LONGITUDINAL AXES OF THE BOOM BASE AFTER LIFTING RATED LOAD AT RATED RADIUS.

