



Load Rating Chart

Model 38100SHL

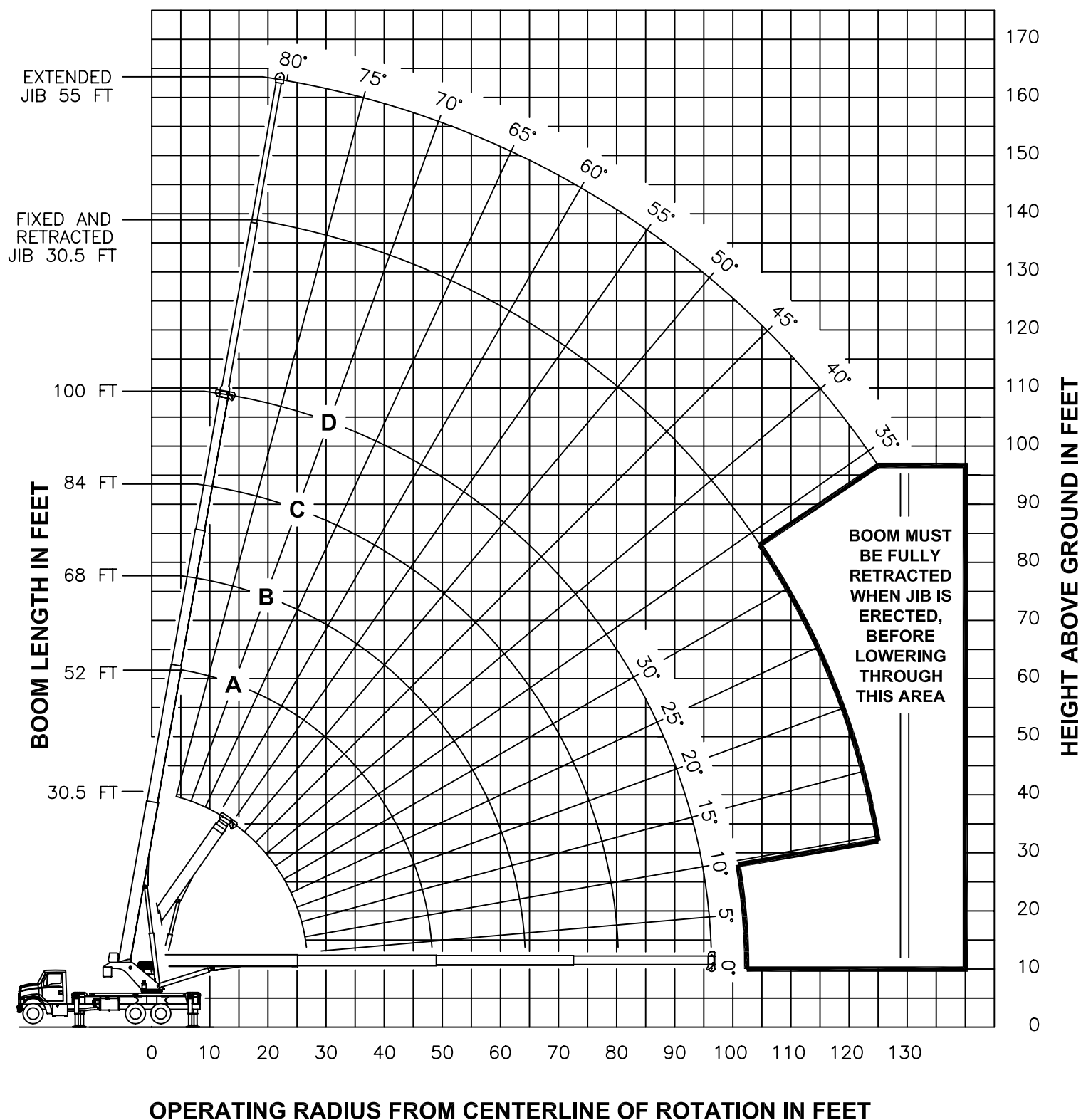


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NOTE: Additional copies of this Load Rating Chart can be purchased from your Manitek Distributor. When ordering, use the part number shown in the bottom left corner of this page.



RANGE DIAGRAM - FULLY EXTENDED OUTRIGGER CONFIGURATION -





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	8 PART LINE	
9080 LBS	18160 LBS	27240 LBS	36320 LBS	45400 LBS	54480 LBS	63560 LBS	72640 LBS	
9500 LBS	19000 LBS	28500 LBS	38000 LBS	47500 LBS	57000 LBS	66500 LBS	76000 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.

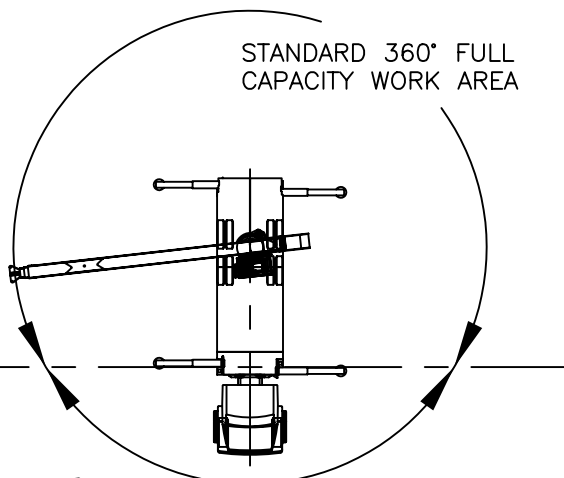
5/8" ROT RESISTANT (5.0:1 SF) – 45400 LBS MIN BREAKING STRENGTH

5/8" 6 X 25 IWRC (3.5:1 SF) – 33250 LBS MIN BREAKING STRENGTH

AREA OF OPERATION

WARNING:

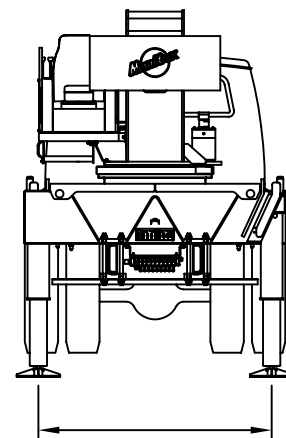
THE FRONT TIRES MUST BE IN CONTACT WITH THE GROUND, AND THE MACHINE LEVEL, WHEN OPERATING IN THIS AREA.



DEDUCTIONS FROM RATED LOADS FOR LOAD HANDLING DEVICES SUPPLIED BY MANITOWOC BOOM TRUCKS, INC.

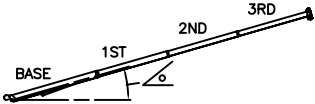
AUXILIARY BLOCK	-----	SEE LOADBLOCK MFRG. NAMEPLATE
OVERHAUL BALL	-----	SEE OVERHAUL BALL MFRG. NAMEPLATE
LOADBLOCK	-----	SEE LOADBLOCK MFRG. NAMEPLATE
HOSE REEL	-----	260 LBS
SWING AROUND JIB (STOWED)	-----	SEE LOAD CHART

USE THIS CHART ONLY
WHEN ALL OUTRIGGERS
ARE FULLY RETRACTED



85.75 REF
(7' - 1.75 REF)

- FULLY RETRACTED OUTRIGGER CONFIGURATION -

LOAD RATINGS IN LBS WITH ALL OUTRIGGERS FULLY RETRACTED LMI CODE #13										
OPERATING RADIUS FT	LOADED BOOM ANGLE BOOM LENGTH AND MARKER									
			A		B		C		D	
	°	30.5 FT	°	52 FT	°	68 FT	°	84 FT	°	100 FT
5	74	76000								
8	68	44230								
10	64	28970	76	29900						
12	60	20950	73	21770	78	22040				
15	53	14180	70	14910	76	15150	79	15290		
20	40	8360	64	9040	71	9250	76	9380	79	9460
25	20	5210	58	5910	67	6110	72	6220	76	6300
30			51	3960	62	4150	69	4260	73	4330
35			43	2620	57	2810	65	2920	70	2990
40			34	1640	52	1840	61	1950	67	2010
45			22	890	46	1100	57	1210	64	1270
50									60	690
		590 LBS		350 LBS		270 LBS		220 LBS		180 LBS
		890 LBS		530 LBS		400 LBS		330 LBS		280 LBS

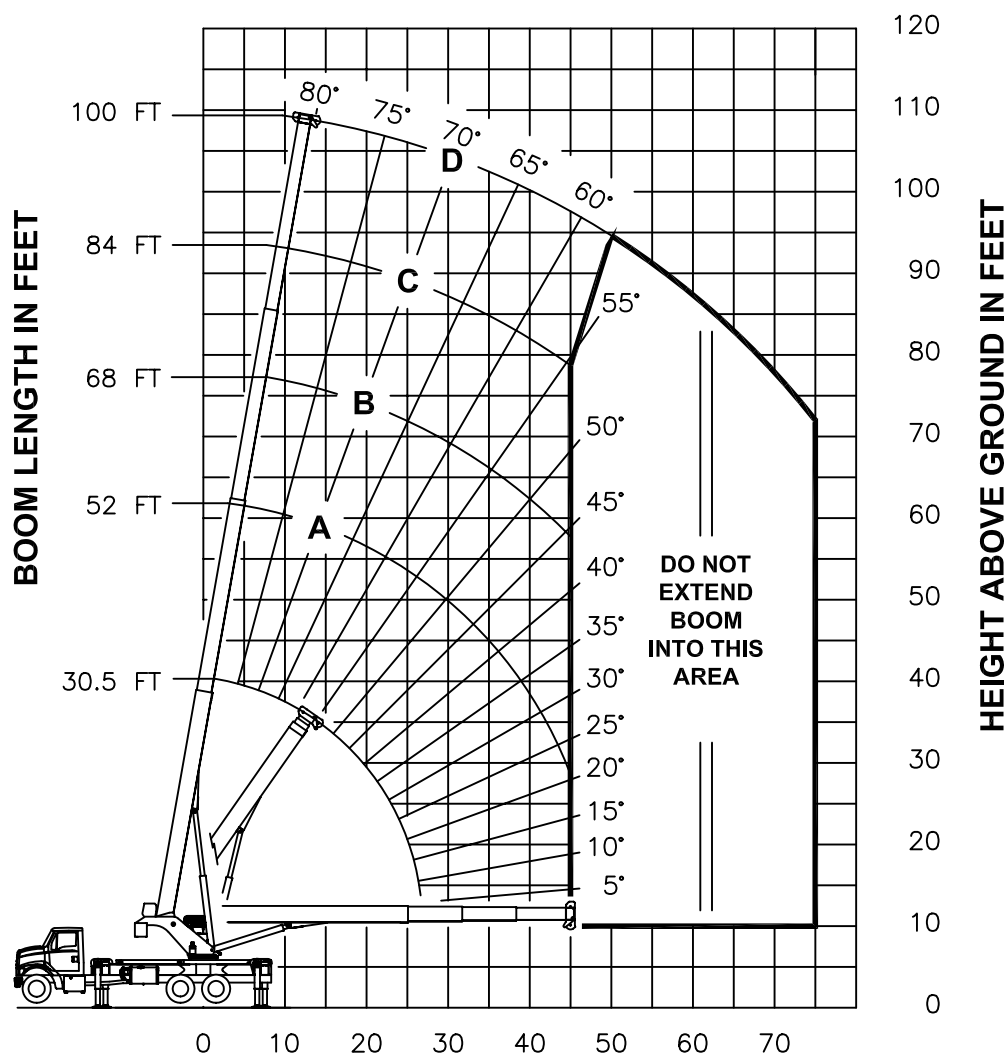
NO JIBS ARE TO BE
ERECTED IN THIS
OUTRIGGER
CONFIGURATION

FIXED	DEDUCTIONS FOR STOWED JIBS
TELESCOPIC	

NO JIBS ARE TO BE
ERECTED IN THIS
OUTRIGGER
CONFIGURATION



RANGE DIAGRAM - FULLY RETRACTED OUTRIGGER CONFIGURATION -

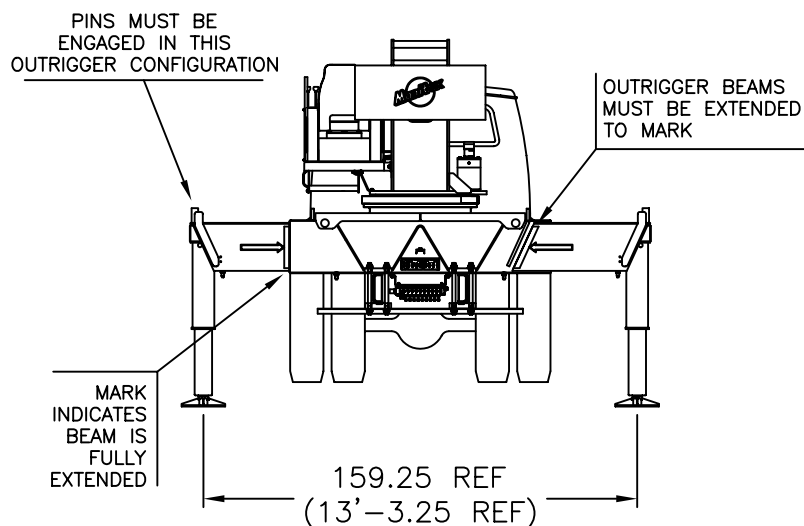


OPERATING RADIUS FROM CENTERLINE OF ROTATION IN FEET

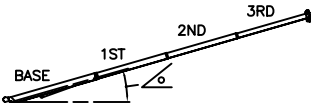
NOTE : LIFTING PERSONNEL WITH CRANE IN THIS OUTRIGGER CONFIGURATION IS STRICTLY PROHIBITED. USE ONLY FULLY EXTENDED OUTRIGGER CONFIGURATION WHEN LIFTING PERSONNEL.



**USE THIS CHART ONLY WHEN
ALL OUTRIGGERS ARE IN THE
INTERMEDIATE POSITION**

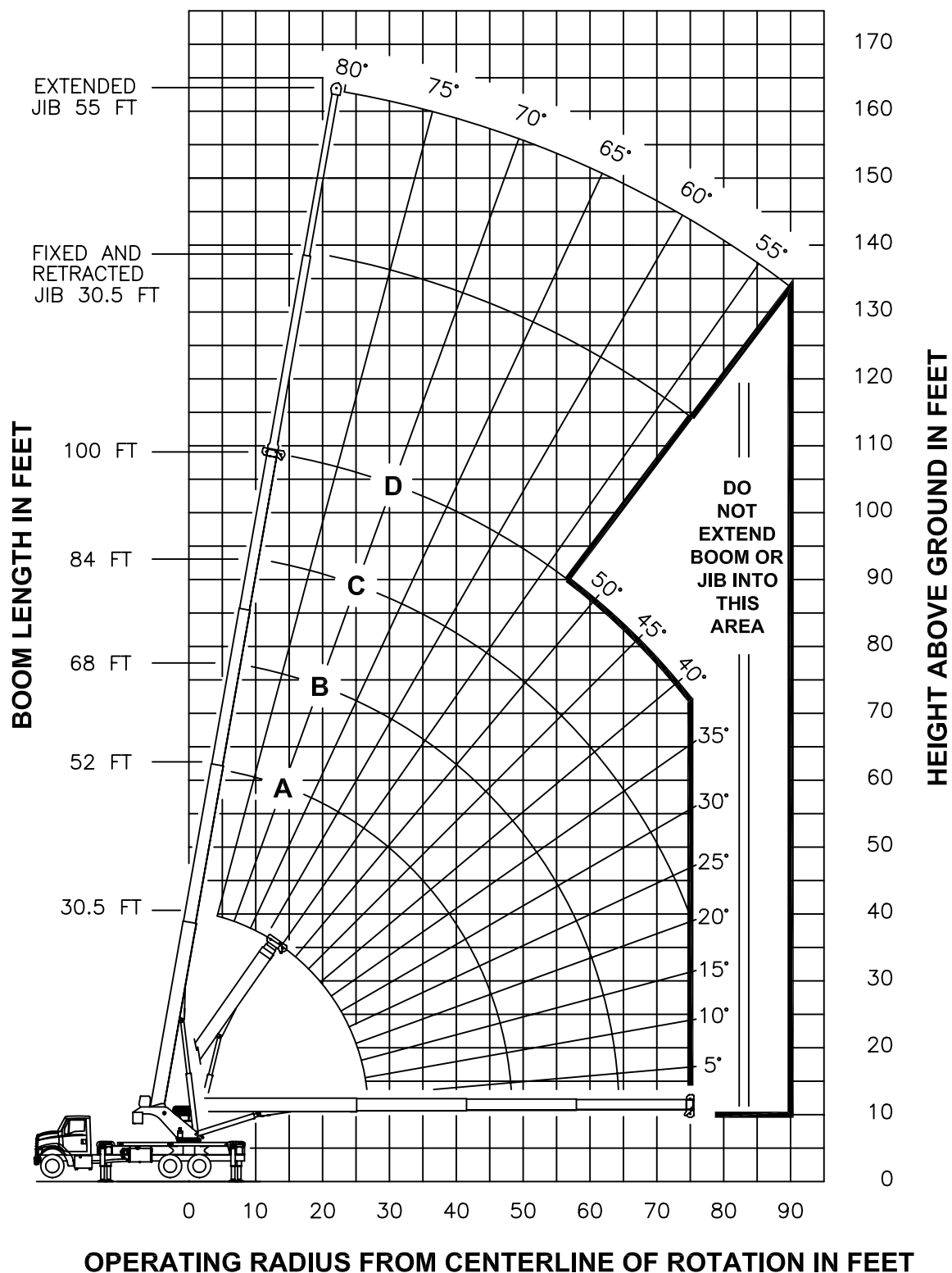


- INTERMEDIATE OUTRIGGER CONFIGURATION -

LOAD RATINGS IN LBS WITH ALL OUTRIGGERS IN THE INTERMEDIATE POSITION LMI CODE #9										JIB LOAD RATINGS IN LBS WITH ALL OUTRIGGERS IN THE INTERMEDIATE POSITION								
OPERATING RADIUS FT	LOADED BOOM ANGLE BOOM LENGTH AND MARKER										OPERATING RADIUS FT	FIXED JIB		TELESCOPIC JIB				
			LMI CODE #10		LMI CODE #11		LMI CODE #12											
	BOOM LENGTH FOR ALL BOOM LENGTHS SEE WARNING NOTE 4	BOOM LENGTH FOR ALL BOOM LENGTHS SEE WARNING NOTE 4	BOOM LENGTH FOR ALL BOOM LENGTHS SEE WARNING NOTE 4	BOOM LENGTH FOR ALL BOOM LENGTHS SEE WARNING NOTE 4	BOOM LENGTH FOR ALL BOOM LENGTHS SEE WARNING NOTE 4	BOOM LENGTH FOR ALL BOOM LENGTHS SEE WARNING NOTE 4												
	BOOM LENGTH FOR ALL BOOM LENGTHS SEE WARNING NOTE 4	BOOM LENGTH FOR ALL BOOM LENGTHS SEE WARNING NOTE 4	BOOM LENGTH FOR ALL BOOM LENGTHS SEE WARNING NOTE 4	BOOM LENGTH FOR ALL BOOM LENGTHS SEE WARNING NOTE 4	BOOM LENGTH FOR ALL BOOM LENGTHS SEE WARNING NOTE 4	BOOM LENGTH FOR ALL BOOM LENGTHS SEE WARNING NOTE 4												
			A		B		C		D									
	30.5 FT	52 FT	68 FT	84 FT	100 FT													
5	74 76000																	
8	68 61000																	
10	64 52860	76 31500									10							
12	60 46980	73 31500	78 31500								12							
15	53 35350	70 31500	76 31500	79 23700							15							
20	40 20280	64 21130	71 21390	76 20600	79 14000						20							
25	20 13360	58 14180	67 14410	72 14560	76 13500						25							
30		51 10200	62 10420	69 10550	73 10640	30 77 7300	77 7000											
35		43 7620	57 7830	65 7960	70 8040	35 75 7100	75 6800	78 4000										
40		34 5800	52 6020	61 6140	67 6220	40 73 6520	73 6100	76 3850										
45		22 4450	46 4680	57 4790	64 4870	45 71 5150	71 4730	74 3700										
50			39 3640	52 3760	60 3830	50 69 4100	69 3680	73 3550										
55			32 2810	48 2940	57 3010	55 66 3270	66 2840	71 3310										
60			22 2130	43 2270	53 2340	60 64 2590	64 2160	69 2890										
65				37 1710	49 1780	65 61 2020	61 1590	67 2320										
70				31 1240	45 1310	70 59 1550	59 1120	65 1830										
75				22 830	40 910	75 56 1140	56 710	63 1420										
80						80		61 1060										
85						85		59 750										
90						90		56 480										
			590 LBS		350 LBS		270 LBS		220 LBS		180 LBS		FIXED		DEDUCTIONS FOR STOWED JIBS			
			890 LBS		530 LBS		400 LBS		330 LBS		280 LBS		TELESCOPIC					



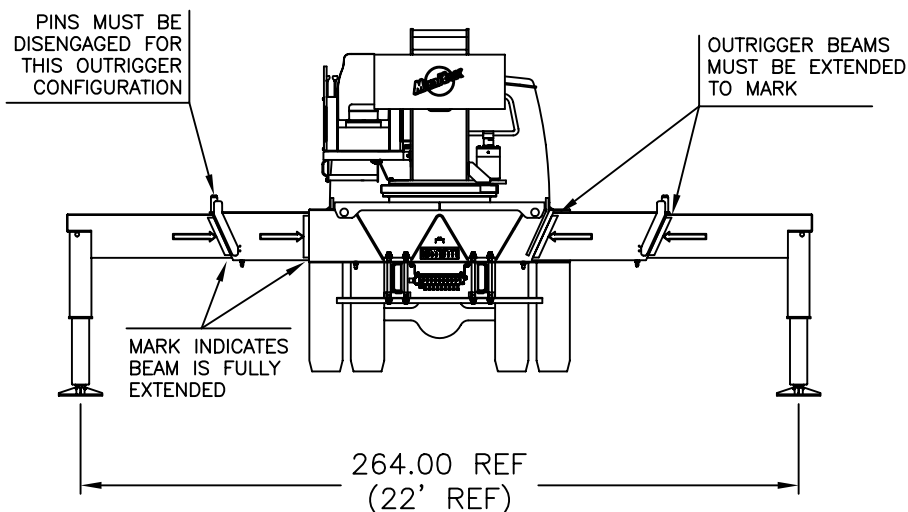
RANGE DIAGRAM - INTERMEDIATE OUTRIGGER CONFIGURATION -



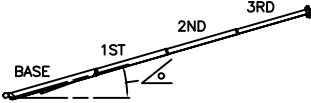
NOTE : LIFTING PERSONNEL WITH CRANE IN THIS OUTRIGGER CONFIGURATION IS STRICTLY PROHIBITED. USE ONLY FULLY EXTENDED OUTRIGGER CONFIGURATION WHEN LIFTING PERSONNEL.



**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 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	
												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
	A	B	C	D													
	30.5 FT	52 FT	68 FT	84 FT	100 FT						30.5 FT	30.5 FT	55 FT				
5	74	76000															
8	68	61000															
10	64	52860	76	31500													
12	60	47000	73	31500	78	31500											
15	53	40280	70	31500	76	31500	79	23700									
20	40	31870	64	28680	71	26820	76	20600	79	14000							
25	20	24430	58	23830	67	22160	72	18300	76	13500							
30			51	20400	62	19080	69	15870	73	12820	30	77	7300	77	7000		
35			43	15980	57	16200	65	13950	70	11380	35	75	7100	75	6800	78	4000
40			34	12890	52	13110	61	12350	67	10160	40	73	6620	73	6240	76	3850
45			22	10610	46	10840	57	10960	64	9370	45	71	6060	71	5670	74	3700
50					39	9090	52	9220	60	8430	50	69	5550	69	5150	73	3550
55					32	7710	48	7830	57	7620	55	66	5100	66	4690	71	3310
60					22	6580	43	6710	53	6790	60	64	4680	64	4210	69	3090
65							37	5780	49	5860	65	61	4210	61	3740	67	2900
70							31	5000	45	5070	70	59	3800	59	3330	65	2710
75							22	4320	40	4410	75	56	3440	56	2970	63	2550
80							7	3730	35	3830	80	53	3120	53	2660	61	2400
85									30	3320	85	50	2840	50	2370	59	2270
90									22	2880	90	47	2590	47	2120	56	2080
95									11	2470	95	43	2350	43	1890	54	1890
100											100	40	2150	40	1690	52	1710
105											105	36	1960	36	1500	49	1540
110											110	32	1760	32	1300	46	1390
115											115	27	1500	27	1090	43	1250
120											120	21	1270	21	850	40	1120
125											125	13	1040	13	630	37	1000

**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 TELESKOPED 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 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 , IS THE INCLUDED ANGLE BETWEEN THE HORIZONTAL AND LONGITUDINAL AXES OF THE BOOM BASE AFTER LIFTING RATED LOAD AT RATED RADIUS.