

# Load Rating Chart

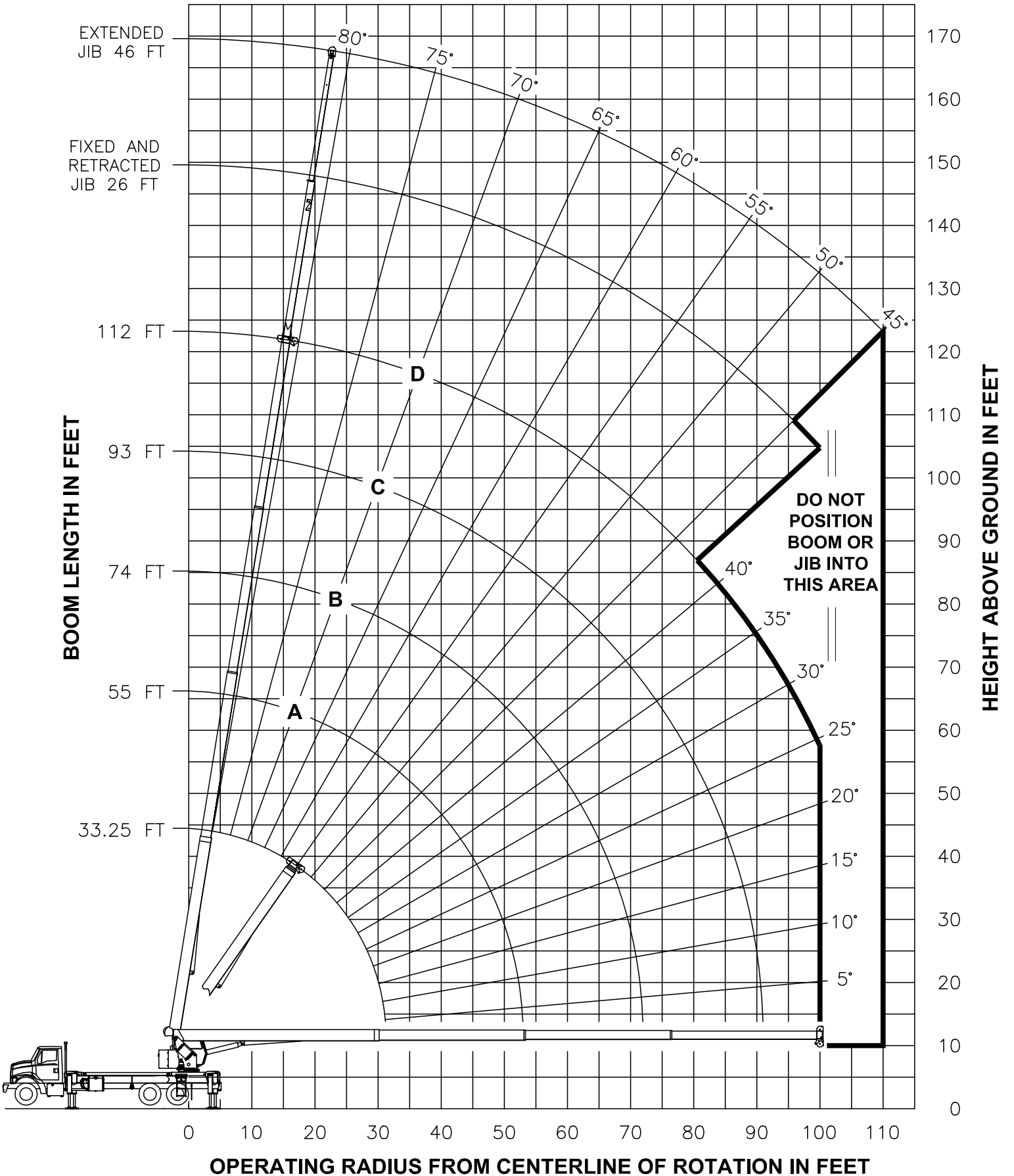
***Model 30112S***



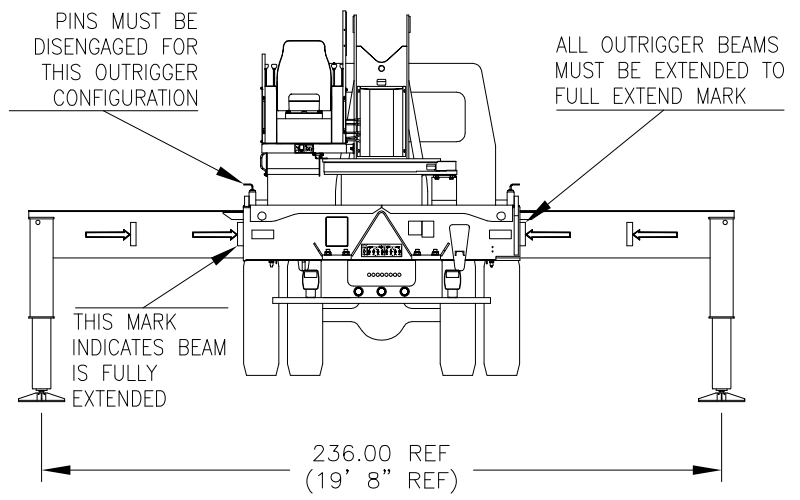
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**NOTE:** Additional copies of this Load Rating Chart can be purchased from your Manitex Distributor. When ordering, use the part number shown in the bottom left corner of this page.

# RANGE DIAGRAM - FULLY EXTENDED OUTRIGGER CONFIGURATION -



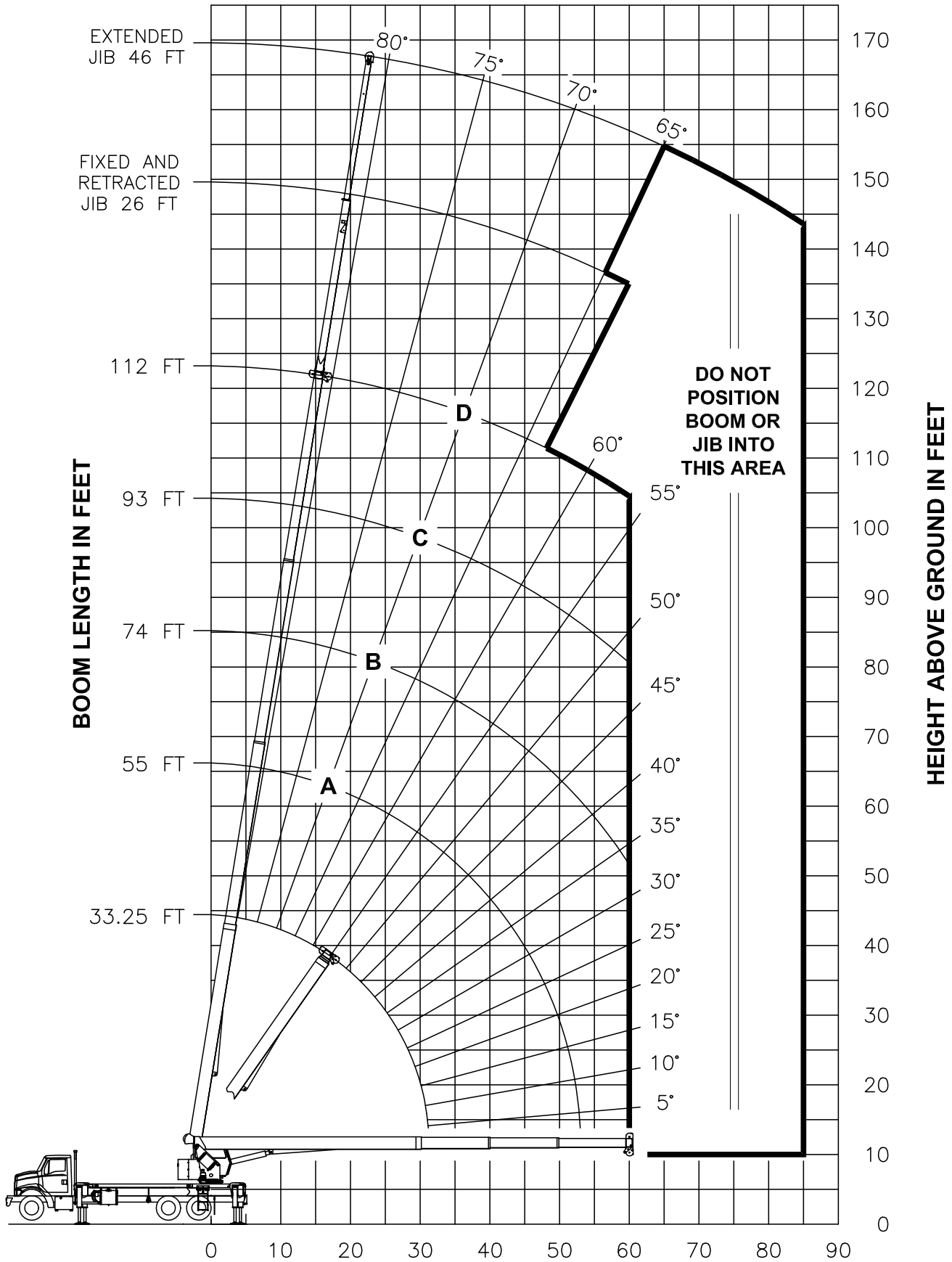
**USE THIS CHART ONLY  
WHEN ALL OUTRIGGERS  
ARE FULLY EXTENDED**



## MAIN BOOM AND JIB LIFTING CAPACITIES

MAIN BOOM RATED LOADS											JIB RATED LOADS FOR ALL BOOM LENGTHS						
LOAD RADIUS (FT)	33.25 FT (RETR) LMI CODE 1		55 FT (A) LMI CODE 1		74 FT (B) LMI CODE 1		93 FT (C) LMI CODE 1		112 FT (D) LMI CODE 1		LOAD RADIUS (FT)	26 FT FIXED JIB LMI CODE 2		26 FT TELE JIB LMI CODE 3		46 FT TELE JIB LMI CODE 4	
	LOADED BOOM ANGLE (DEG)	LIFTING CAPACITY (LBS)	LOADED BOOM ANGLE (DEG)	LIFTING CAPACITY (LBS)	LOADED BOOM ANGLE (DEG)	LIFTING CAPACITY (LBS)	LOADED BOOM ANGLE (DEG)	LIFTING CAPACITY (LBS)	LOADED BOOM ANGLE (DEG)	LIFTING CAPACITY (LBS)		LOADED BOOM ANGLE (DEG)	LIFTING CAPACITY (LBS)	LOADED BOOM ANGLE (DEG)	LIFTING CAPACITY (LBS)	LOADED BOOM ANGLE (DEG)	LIFTING CAPACITY (LBS)
5	80	60000									5						
8	75	43830									8						
10	71.5	37330	79.5	25000							10						
12	68	32640	77.5	25000							12						
15	62	27600	74.5	24610	79.5	22120					15						
20	51.5	21850	69	19320	75.5	18080	79.5	13300			20						
25	38.5	16630	63	15930	71.5	14750	76.5	11900	79.5	8000	25						
30	18.5	12710	57	13250	67.5	12440	73.5	10550	77	8000	30	80	4500	80	4300		
35			50	10540	63	10720	70	9330	74.5	7290	35	78	4500	78	4300	79.5	2700
40			42.5	8350	58.5	8570	67	8500	72	6600	40	76.5	4500	76.5	4300	78	2700
45			33.5	6630	53.5	6850	63	6960	69.5	5970	45	74.5	4300	74.5	4030	76.5	2700
50			21.5	5330	48	5560	59.5	5670	66.5	5390	50	72.5	4000	72.5	3720	75	2700
55					42.5	4550	55.5	4660	63.5	4730	55	70.5	3700	70.5	3420	73.5	2700
60					36	3740	51.5	3860	60.5	3920	60	68	3420	68	3140	72	2700
65					27.5	3070	47	3190	57	3260	65	66	3130	66	2800	70	2580
70					16	2510	42.5	2640	54	2710	70	63.5	2790	63.5	2440	68	2390
75							37	2170	50.5	2240	75	61	2350	61	2050	66.5	2220
80							31	1770	46.5	1840	80	58	1940	58	1650	64.5	2020
85							23.5	1410	42.5	1490	85	55.5	1590	55.5	1300	62	1770
90							11	1100	38.5	1180	90	52.5	1290	52.5	990	59.5	1460
95									33.5	910	95	49.5	1020	49.5	720	57	1190
100									28	670	100	46.5	780	46.5	480	54.5	940
105											105					52	730
110											110					49.5	530
		510 LBS		310 LBS		230 LBS		190 LBS		160 LBS		DEDUCTIONS FOR STOWED FIXED JIB					
		770 LBS		470 LBS		350 LBS		280 LBS		230 LBS		DEDUCTIONS FOR STOWED TELESCOPIC JIB					

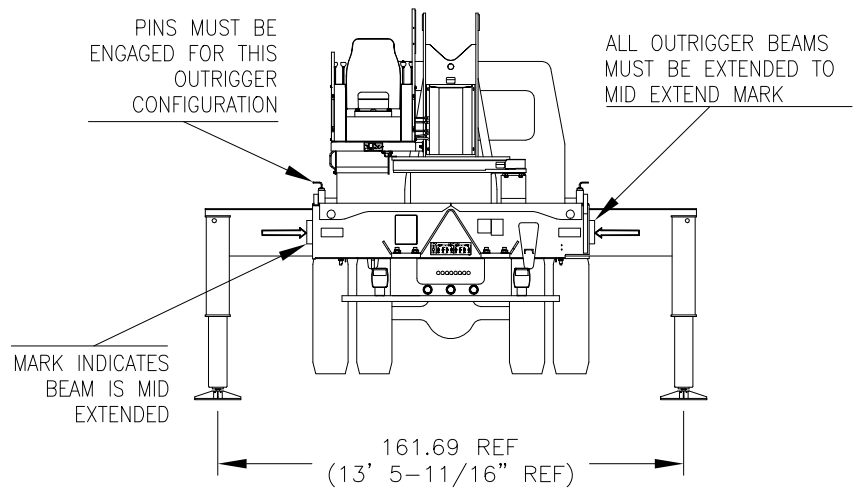
# RANGE DIAGRAM - MID EXTEND OUTRIGGER CONFIGURATION -



**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.**

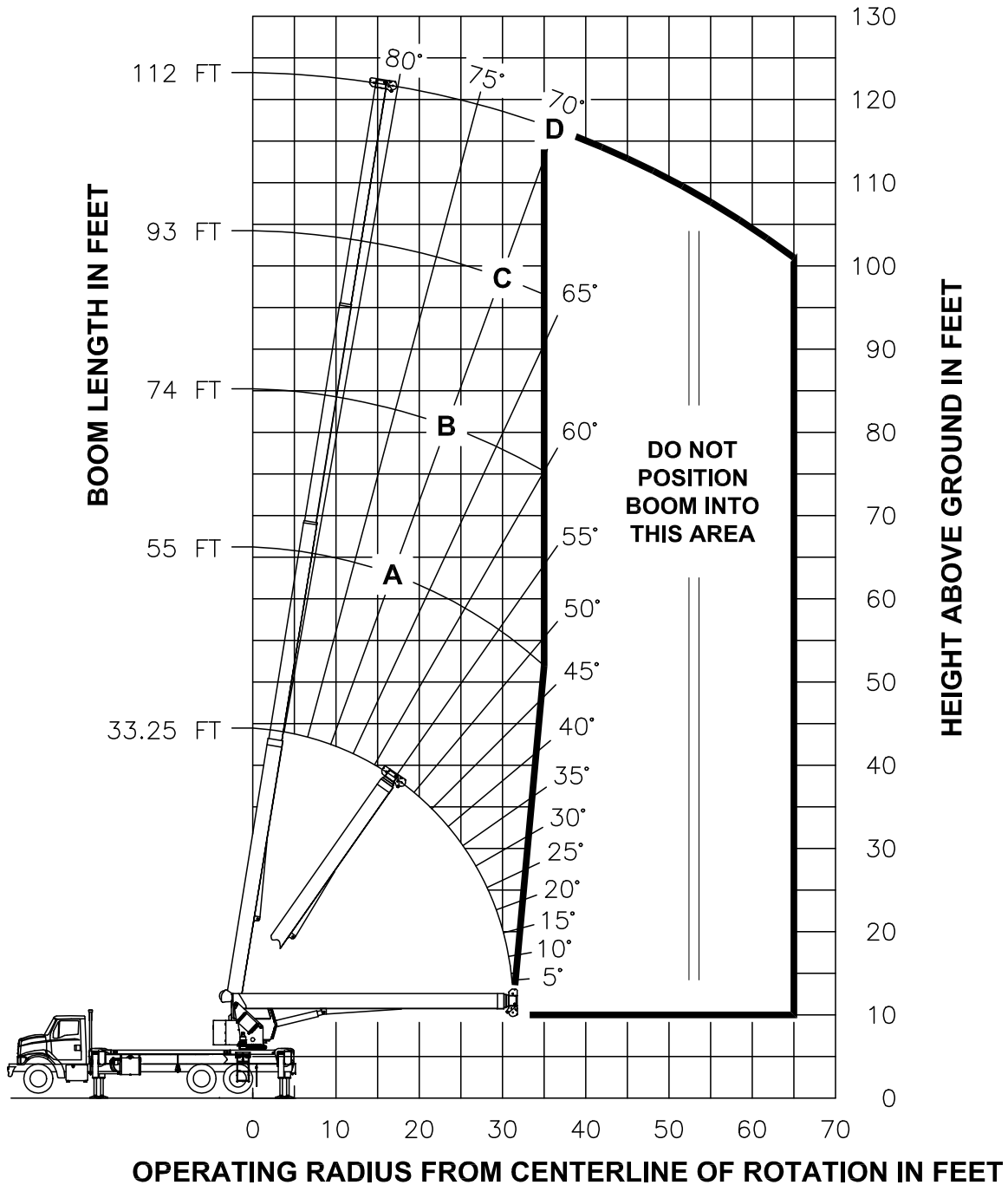
**USE THIS CHART ONLY WHEN ALL OUTRIGGERS ARE IN THE MID EXTEND POSITION**



## MAIN BOOM AND JIB LIFTING CAPACITIES

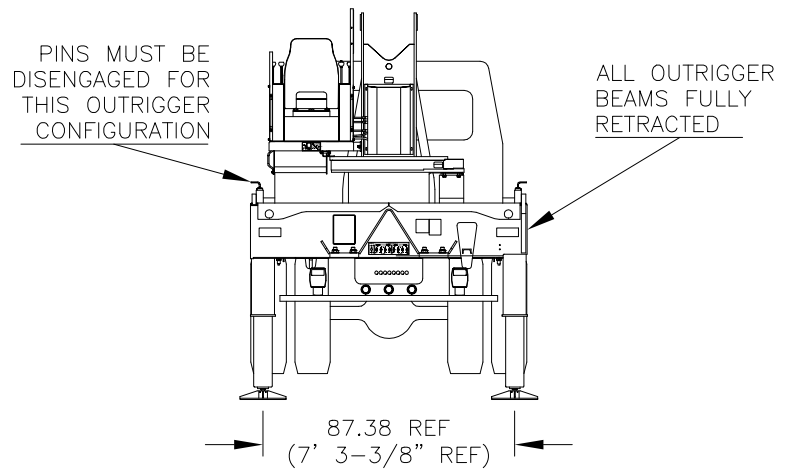
MAIN BOOM RATED LOADS											JIB RATED LOADS FOR ALL BOOM LENGTHS						
LOAD RADIUS (FT)	33.25 FT (RETR) LMI CODE 9		55 FT (A) LMI CODE 9		74 FT (B) LMI CODE 9		93 FT (C) LMI CODE 9		112 FT (D) LMI CODE 9		LOAD RADIUS (FT)	26 FT FIXED JIB LMI CODE 10		26 FT TELE JIB LMI CODE 11		46 FT TELE JIB LMI CODE 12	
	LOADED BOOM ANGLE (DEG)	LIFTING CAPACITY (LBS)	LOADED BOOM ANGLE (DEG)	LIFTING CAPACITY (LBS)	LOADED BOOM ANGLE (DEG)	LIFTING CAPACITY (LBS)	LOADED BOOM ANGLE (DEG)	LIFTING CAPACITY (LBS)	LOADED BOOM ANGLE (DEG)	LIFTING CAPACITY (LBS)		LOADED BOOM ANGLE (DEG)	LIFTING CAPACITY (LBS)	LOADED BOOM ANGLE (DEG)	LIFTING CAPACITY (LBS)	LOADED BOOM ANGLE (DEG)	LIFTING CAPACITY (LBS)
5	80	60000									5						
8	75	43830									8						
10	71.5	37330	79.5	25000							10						
12	68	32640	77.5	25000							12						
15	62	24850	74.5	24610	79.5	22120					15						
20	51.5	13890	69	14520	75.5	14760	79.5	13300			20						
25	38.5	8910	63	9510	71.5	9720	76.5	9850	79.5	8000	25						
30	18.5	6030	57	6650	67.5	6850	73.5	6960	77	7040	30	80	4500	80	4300		
35			50	4790	63	4990	70	5100	74.5	5170	35	78	4500	78	4300	79.5	2700
40			42.5	3490	58.5	3690	67	3800	72	3860	40	76.5	3950	76.5	3640	78	2700
45			33.5	2530	53.5	2730	63	2830	69.5	2900	45	74.5	2980	74.5	2670	76.5	2700
50			21.5	1770	48	1990	59.5	2090	66.5	2160	50	72.5	2230	72.5	1920	75	2440
55					42.5	1400	55.5	1500	63.5	1570	55	70.5	1640	70.5	1330	73.5	1830
60					36	920	51.5	1020	60.5	1090	60	68	1160	68	850	72	1350
65																70	940
	510 LBS		310 LBS		230 LBS		190 LBS		160 LBS		DEDUCTIONS FOR STOWED FIXED JIB						
	770 LBS		470 LBS		350 LBS		280 LBS		230 LBS		DEDUCTIONS FOR STOWED TELESCOPIC JIB						

# RANGE DIAGRAM - FULLY RETRACTED OUTRIGGER CONFIGURATION -



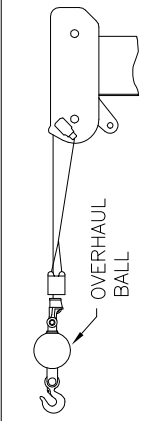
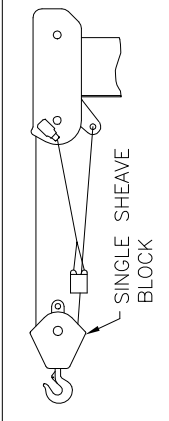
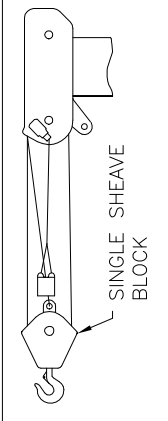
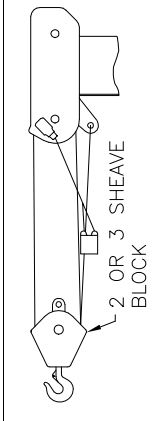
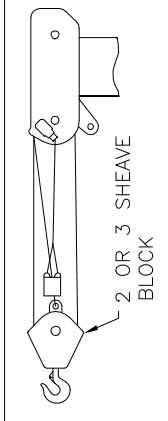
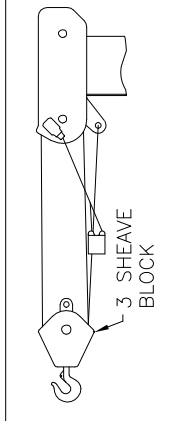
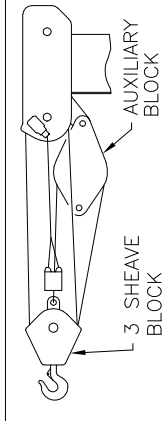
**NOTE : LIFTING PERSONNEL WITH CRANE IN THIS OUTRIGGER CONFIGURATION IS STRICTLY PROHIBITED. USE ONLY FULLY EXTENDED OUTRIGGER CONFIGURATION WHEN LIFTING PERSONNEL.**

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

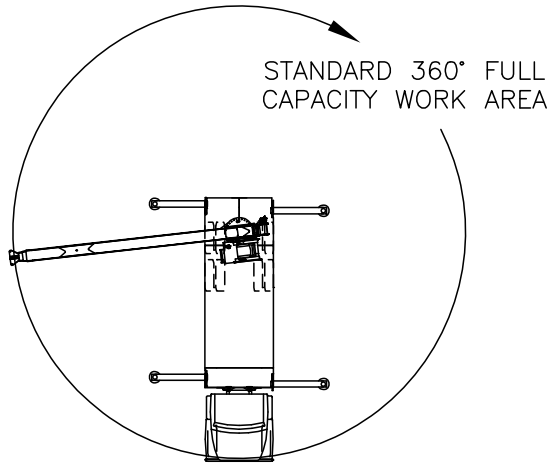


### MAIN BOOM AND JIB LIFTING CAPACITIES

MAIN BOOM RATED LOADS											NO JIBS ARE TO BE ERCTED IN THIS OUTRIGGER CONFIGURATION
LOAD RADIUS (FT)	33.25 FT (RETR) LMI CODE 13		55 FT (A) LMI CODE 13		74 FT (B) LMI CODE 13		93 FT (C) LMI CODE 13		112 FT (D) LMI CODE 13		
	LOADED BOOM ANGLE (DEG)	LIFTING CAPACITY (LBS)	LOADED BOOM ANGLE (DEG)	LIFTING CAPACITY (LBS)	LOADED BOOM ANGLE (DEG)	LIFTING CAPACITY (LBS)	LOADED BOOM ANGLE (DEG)	LIFTING CAPACITY (LBS)	LOADED BOOM ANGLE (DEG)	LIFTING CAPACITY (LBS)	
5	80	60000									
8	75	27790									
10	71.5	17750	79.5	18400							
12	68	12510	77.5	13100							
15	62	8100	74.5	8640	79.5	8850					
20	51.5	4330	69	4850	75.5	5030	79.5	5140			
25	38.5	2310	63	2820	71.5	3000	76.5	3100	79.5	3170	
30	18.5	1020	57	1560	67.5	1740	73.5	1840	77	1900	
35			50	700	63	880	70	980	74.5	1040	
	510 LBS		310 LBS		230 LBS		190 LBS		160 LBS		DEDUCTIONS FOR STOWED FIXED JIB
	770 LBS		470 LBS		350 LBS		280 LBS		230 LBS		DEDUCTIONS FOR STOWED TELESCOPIC JIB

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	
							<p>ANTI-TWO-BLOCK SYSTEM MUST BE IN GOOD OPERATING CONDITION BEFORE OPERATING CRANE.</p> <p>REFER TO THE OWNER'S MANUAL.</p> <p>KEEP AT LEAST 3 WRAPS OF LOAD LINE ON THE DRUM AT ALL TIMES.</p>
8500 LBS	17000 LBS	25500 LBS	34000 LBS	42500 LBS	51000 LBS	60000 LBS	
7700 LBS	15400 LBS	23100 LBS	30800 LBS	38500 LBS	46200 LBS	53900 LBS	9/16" ROT RESISTANT (5.0:1 SF) - 38500 LBS MIN BREAKING STRENGTH

### AREA OF OPERATION



### DEDUCTIONS FROM RATED LOADS FOR LOAD HANDLING DEVICES SUPPLIED BY MANITEX INC.

AUXILIARY BLOCK	—	—	—	—	—	—	—	—	—	—	—	50 LBS
OVERHAUL BALL	—	—	—	—	—	—	—	—	—	—	—	SEE OVERHAUL BALL MANUFACTURER NAMEPLATE
LOAD BLOCK	—	—	—	—	—	—	—	—	—	—	—	SEE BLOCK MANUFACTURER NAMEPLATE
HOSE REEL	—	—	—	—	—	—	—	—	—	—	—	140 LBS
SWING AROUND JIB	—	—	—	—	—	—	—	—	—	—	—	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 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.