GUAY

Load Rating Chart

4594

Model 50128SHL

Manitex

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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.

LMI OPERATING CODES

CODE	CRANE CONFIGURATION	OUTRIGGER CONFIGURATION	AREA OF OPERATION
#1	MAIN BOOM	FULLY EXTENDED	OVER REAR
#3	MAIN BOOM	FULLY EXTENDED	FULL 360°
#4	MAIN BOOM	MID POSITION	FULL 360°
#5	MAIN BOOM	RETRACTED	FULL 360°
#7	RETRACTED JIB 0° OFFSET	FULLY EXTENDED	OVER REAR
#8	RETRACTED JIB 0° OFFSET	FULLY EXTENDED	FULL 360°
#9	RETRACTED JIB 15° OFFSET	FULLY EXTENDED	OVER REAR
#10	RETRACTED JIB 15° OFFSET	FULLY EXTENDED	FULL 360°
#11	RETRACTED JIB 30° OFFSET	FULLY EXTENDED	OVER REAR
#12	RETRACTED JIB 30° OFFSET	FULLY EXTENDED	FULL 360°
#13	EXTENDED JIB 0° OFFSET	FULLY EXTENDED	OVER REAR
#14	EXTENDED JIB 0° OFFSET	FULLY EXTENDED	FULL 360°
#15	EXTENDED JIB 15° OFFSET	FULLY EXTENDED	OVER REAR
#16	EXTENDED JIB 15° OFFSET	FULLY EXTENDED	FULL 360°
#17	EXTENDED JIB 30° OFFSET	FULLY EXTENDED	OVER REAR
#18	EXTENDED JIB 30° OFFSET	FULLY EXTENDED	FULL 360°
#19	RETRACTED JIB 0° OFFSET	MID POSITION	FULL 360°
#20	RETRACTED JIB 15° OFFSET	MID POSITION	FULL 360°
#21	RETRACTED JIB 30° OFFSET	MID POSITION	FULL 360°
#22	EXTENDED JIB 0° OFFSET	MID POSITION	FULL 360°
#23	EXTENDED JIB 15° OFFSET	MID POSITION	FULL 360°
#24	EXTENDED JIB 30° OFFSET	MID POSITION	FULL 360°
#25	PERSONNEL LIFTING MAIN BOOM	FULLY EXTENDED	FULL 360°
#26	PERSONNEL LIFTING RETR JIB 0° OFFSET	FULLY EXTENDED	FULL 360°
#27	PERSONNEL LIFTING RETR JIB 15° OFFSET	FULLY EXTENDED	FULL 360°
#28	PERSONNEL LIFTING RETR JIB 30° OFFSET	FULLY EXTENDED	FULL 360°
#29	PERSONNEL LIFTING EXTENDED JIB 0° OFFSET	FULLY EXTENDED	FULL 360°
#30	PERSONNEL LIFTING EXTENDED JIB 15° OFFSET	FULLY EXTENDED	FULL 360°
#31	PERSONNEL LIFTING EXTENDED JIB 30° OFFSET	FULLY EXTENDED	FULL 360°

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.

WARNING (CONTINUED)

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.

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.

INFORMATION

1. DEDUCTIONS MUST BE MADE FROM RATED LOADS FOR 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.

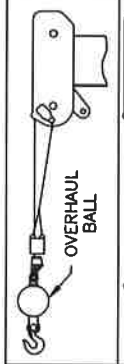
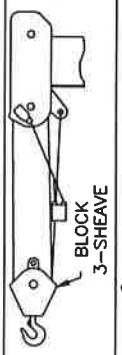
2. LOAD RATINGS ABOVE THE HEAVY LINE ARE STRUCTURALLY LIMITED CAPACITIES. LOAD RATINGS BELOW THE HEAVY LINE ARE STABILITY LIMITED CAPACITIES AND DO NOT EXCEED 85% OF TIPPING.

DEFINITIONS

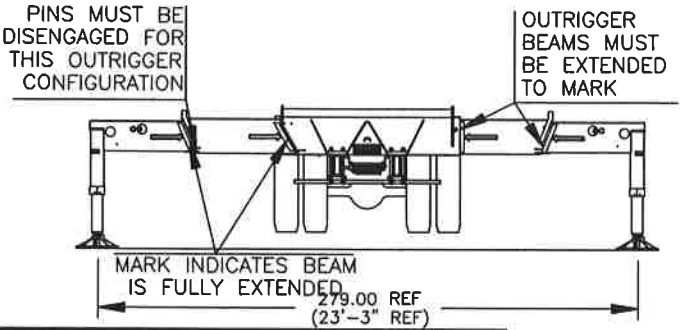
1. OPERATING RADIUS IS THE HORIZONTAL DISTANCE FROM THE AXIS OF ROTATION TO THE CENTER OF THE VERTICAL HOIST LINE OR TACKLE WITH LOAD APPLIED.

2. LOADED BOOM ANGLE IS THE INCLUDED ANGLE BETWEEN THE HORIZONTAL AND LONGITUDINAL AXES OF THE BOOM BASE AFTER LIFTING RATED LOAD AT RATED RADIUS.

ALLOWABLE LINE PULL

1 PART LINE	2 PART LINE	3 PART LINE	4 PART LINE	5 PART LINE	6 PART LINE	7 PART LINE	8 PART LINE	9 PART LINE	10 PART LINE
	 BLOCK 3-SHEAVE

USE THIS CHART ONLY WHEN ALL OUTRIGGER BEAMS ARE FULLY EXTENDED



MAIN BOOM LIFTING CAPACITIES

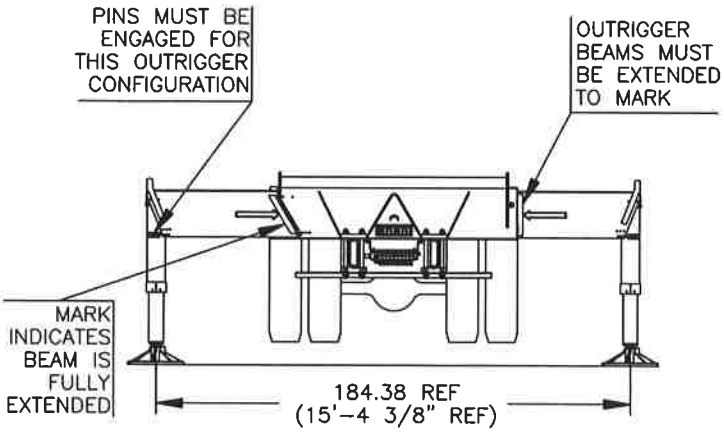
LOAD RADIUS (FT)	BOOM LENGTH 38.5 FT			BOOM LENGTH 53 FT (A)			BOOM LENGTH 66 FT (B)			BOOM LENGTH 78 FT (C)			LOAD RADIUS (FT)
	LOADED BOOM ANGLE (DEG)	CODE 1 OVER REAR (LBS)	CODE 3 FULL 360° (LBS)	LOADED BOOM ANGLE (DEG)	CODE 1 OVER REAR (LBS)	CODE 3 FULL 360° (LBS)	LOADED BOOM ANGLE (DEG)	CODE 1 OVER REAR (LBS)	CODE 3 FULL 360° (LBS)	LOADED BOOM ANGLE (DEG)	CODE 1 OVER REAR (LBS)	CODE 3 FULL 360° (LBS)	
6	73.5	100000	100000										6
8	70.5	86600	86600										8
10	67	76400	76400	74.5	51000	51000	78	51000	51000				10
12	64	68400	68400	72.5	51000	51000	76.5	51000	51000	79	41710	41710	12
15	59	59000	59000	68.5	51000	51000	73.5	46650	46650	77	37880	37880	15
20	49.5	47700	47700	62.5	45700	45700	69	39300	39300	73	32140	32140	20
25	38.5	38300	38300	56	38400	38400	64	33450	33450	69	27890	27890	25
30	23.5	30200	30200	49.5	31590	31590	59	29140	29140	65	24230	24230	30
35				41.5	26180	23590	54	25490	24100	61	21310	21310	35
40				32	22080	18360	48	22480	18860	56.5	19160	19150	40
45				18.5	18340	14670	42	19280	15190	52	17070	15470	45
50							34.5	16710	12460	46.5	15330	12740	50
55							25	14420	10350	41	13850	10630	55
60							7	9790	8620	35	12560	8960	60
65										27	11000	7590	65
70										16	9600	6440	70
	1230 LBS			890 LBS			720 LBS			610 LBS			STOWED JIB
	2840 LBS			2620 LBS			2500 LBS			2430 LBS			ERECTED JIB (RETRACTED)
	3170 LBS			2860 LBS			2700 LBS			2600 LBS			ERECTED JIB (EXTENDED)

DEDUCTIONS FOR MAIN BOOM CAPACITIES

LOAD RADIUS (FT)	BOOM LENGTH 91 FT (D)			BOOM LENGTH 103 FT (E)			BOOM LENGTH 116 FT (F)			BOOM LENGTH 128 FT (G)			LOAD RADIUS (FT)
	LOADED BOOM ANGLE (DEG)	CODE 1 OVER REAR (LBS)	CODE 3 FULL 360° (LBS)	LOADED BOOM ANGLE (DEG)	CODE 1 OVER REAR (LBS)	CODE 3 FULL 360° (LBS)	LOADED BOOM ANGLE (DEG)	CODE 1 OVER REAR (LBS)	CODE 3 FULL 360° (LBS)	LOADED BOOM ANGLE (DEG)	CODE 1 OVER REAR (LBS)	CODE 3 FULL 360° (LBS)	
15	79	30000	30000										15
20	76	26010	26010	78.5	22790	22790							20
25	72.5	22620	22620	75.5	20160	20160	78	17660	17660				25
30	69.5	20000	20000	72.5	18080	18080	75.5	16060	16060	77.5	13000	13000	30
35	66	17710	17710	70.5	16070	16070	73	14480	14480	75.5	12760	12760	35
40	62.5	15740	15740	67.5	14360	14360	70.5	13050	13050	73	11760	11760	40
45	59	14050	14050	64	12900	12900	68	11780	11780	71	10800	10800	45
50	55	12620	12620	60.5	11610	11610	65	10640	10640	68.5	10000	10000	50
55	50.5	11380	10830	57	10500	10500	62	9890	9890	66	9130	9130	55
60	46.5	10340	9160	53.5	9760	9290	59	8970	8970	63.5	8320	8320	60
65	41.5	9630	7800	50	8860	7930	56	8160	8030	60.5	7570	7570	65
70	36.5	8770	6660	46	8060	6790	53	7430	6900	58	6910	6910	70
75	30	8000	5700	41.5	7350	5840	49.5	6780	5940	55	6300	6010	75
80	22	7320	4880	37	6720	5020	46	6180	5130	52	5750	5200	80
85	7	5290	4140	31.5	6140	4310	42.5	5650	4420	49	5250	4490	85
90				25	5630	3690	38	5160	3800	46	4790	3870	90
95				15.5	5160	3130	33.5	4720	3260	42	4370	3330	95
100							28.5	4310	2770	38.5	3980	2850	100
105							21.5	3940	2330	34	3620	2410	105
110							7.5	3610	1920	29.5	3300	2020	110
115										23.5	2990	1660	115
120										15	2710	1330	120
	520 LBS			460 LBS			410 LBS			370 LBS			STOWED JIB
	2370 LBS			2330 LBS			2300 LBS			2280 LBS			ERECTED JIB (RETRACTED)
	2520 LBS			2460 LBS			2410 LBS			2380 LBS			ERECTED JIB (EXTENDED)

DEDUCTIONS FOR MAIN BOOM CAPACITIES

USE THIS CHART ONLY WHEN ALL OUTRIGGER BEAMS ARE IN THE MID POSITION



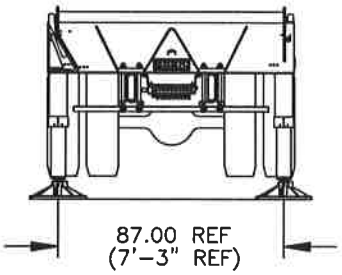
MAIN BOOM LIFTING CAPACITIES

LMI CODE 4

LOAD RADIUS (FT)	BOOM LENGTH 38.5 FT		BOOM LENGTH 53 FT (A)		BOOM LENGTH 66 FT (B)		BOOM LENGTH 78 FT (C)		BOOM LENGTH 91 FT (D)		BOOM LENGTH 103 FT (E)		BOOM LENGTH 116 FT (F)		BOOM LENGTH 128 FT (G)		LOAD RADIUS (FT)
	LOADED BOOM ANGLE (DEG)	FULL 360° (LBS)	LOADED BOOM ANGLE (DEG)	FULL 360° (LBS)	LOADED BOOM ANGLE (DEG)	FULL 360° (LBS)	LOADED BOOM ANGLE (DEG)	FULL 360° (LBS)	LOADED BOOM ANGLE (DEG)	FULL 360° (LBS)	LOADED BOOM ANGLE (DEG)	FULL 360° (LBS)	LOADED BOOM ANGLE (DEG)	FULL 360° (LBS)	LOADED BOOM ANGLE (DEG)	FULL 360° (LBS)	
6	73.5	100000															6
8	70.5	86600															8
10	67	76400	74.5	51000	78	51000											10
12	64	68400	72.5	51000	76.5	51000	79	41710									12
15	59	56700	68.5	51000	73.5	46650	77	37880	79	30000							15
20	49.5	30980	62.5	32090	69	32650	73	32140	76	26010	78.5	22790					20
25	38.5	20080	56	21070	64	21550	69	21850	72.5	22090	75.5	20160	78	17660			25
30	23.5	14000	49.5	14980	59	15420	65	15700	69.5	15900	72.5	16050	75.5	16060	77.5	13000	30
35			41.5	11100	54	11530	61	11790	66	11980	70.5	12120	73	12230	75.5	12310	35
40			32	8410	48	8840	56.5	9090	62.5	9270	67.5	9400	70.5	9510	73	9580	40
45			18.5	6400	42	6860	52	7110	59	7290	64	7410	68	7510	71	7580	45
50					34.5	5340	46.5	5590	55	5770	60.5	5890	65	5990	68.5	6060	50
55					25	4130	41	4390	50.5	4570	57	4690	62	4780	66	4850	55
60					7	3110	35	3420	46.5	3600	53.5	3720	59	3810	63.5	3880	60
65							27	2600	41.5	2790	50	2910	56	3000	60.5	3070	65
70							16	1910	36.5	2110	46	2230	53	2330	58	2390	70
75									30	1530	41.5	1660	49.5	1750	55	1820	75
80									22	1020	37	1160	46	1250	52	1320	80
85													42.5	820	49	880	85
90																	90

DEDUCTIONS FOR JIB FROM MAIN BOOM CAPACITIES								
1230 LBS	890 LBS	720 LBS	610 LBS	520 LBS	460 LBS	410 LBS	370 LBS	STOWED
2840 LBS	2620 LBS	2500 LBS	2430 LBS	2370 LBS	2330 LBS	2300 LBS	2280 LBS	RETR
3170 LBS	2860 LBS	2700 LBS	2600 LBS	2520 LBS	2460 LBS	2410 LBS	2380 LBS	EXTEND

USE THIS CHART WHEN ALL OUTRIGGER BEAMS ARE NOT IN EITHER THE MID OR FULLY EXTENDED POSITION



MAIN BOOM LIFTING CAPACITIES

LMI CODE 5

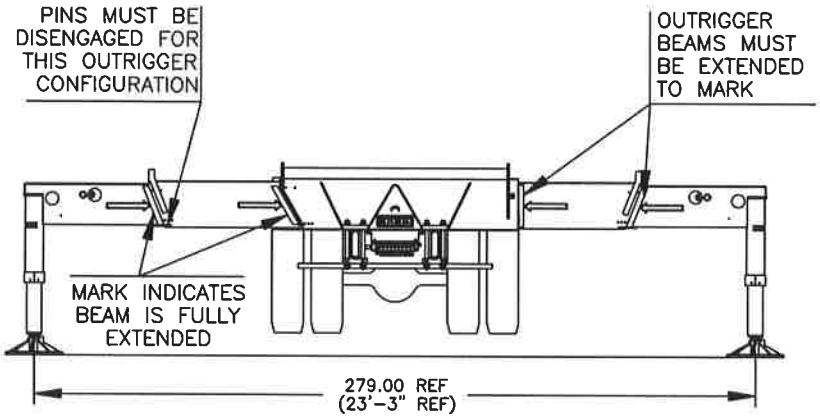
LOAD RADIUS (FT)	BOOM LENGTH 38.5 FT		BOOM LENGTH 53 FT (A)		BOOM LENGTH 66 FT (B)		BOOM LENGTH 78 FT (C)		BOOM LENGTH 91 FT (D)		BOOM LENGTH 103 FT (E)		LOAD RADIUS (FT)
	LOADED BOOM ANGLE (DEG)	FULL 360° (LBS)	LOADED BOOM ANGLE (DEG)	FULL 360° (LBS)	LOADED BOOM ANGLE (DEG)	FULL 360° (LBS)	LOADED BOOM ANGLE (DEG)	FULL 360° (LBS)	LOADED BOOM ANGLE (DEG)	FULL 360° (LBS)	LOADED BOOM ANGLE (DEG)	FULL 360° (LBS)	
6	73.5	100000											6
8	70.5	56080											8
10	67	36440	74.5	37660	78	38300							10
12	64	26180	72.5	27230	76.5	27780	79	28130					12
15	59	17540	68.5	18470	73.5	18940	77	19240	79	19470			15
20	49.5	10150	62.5	10980	69	11400	73	11650	76	11850	78.5	11990	20
25	38.5	6190	56	6990	64	7380	69	7610	72.5	7790	75.5	7920	25
30	23.5	3680	49.5	4500	59	4880	65	5100	69.5	5270	72.5	5390	30
35			41.5	2800	54	3170	61	3390	66	3550	70.5	3660	35
40			32	1540	48	1930	56.5	2140	62.5	2300	67.5	2410	40
45					42	980	52	1200	59	1360	64	1460	45
50													50
55													55

DEDUCTIONS FOR STOWED JIB FROM MAIN BOOM CAPACITIES					
1230 LBS	890 LBS	720 LBS	610 LBS	520 LBS	460 LBS

WARNINGS

1. THE JIB MUST BE IN THE STOWED POSITION, IF SO EQUIPPED, WHEN USING THIS OUTRIGGER CONFIGURATION.
2. DO NOT EXCEED A BOOM LENGTH OF 103 FEET WITH THIS OUTRIGGER CONFIGURATION.

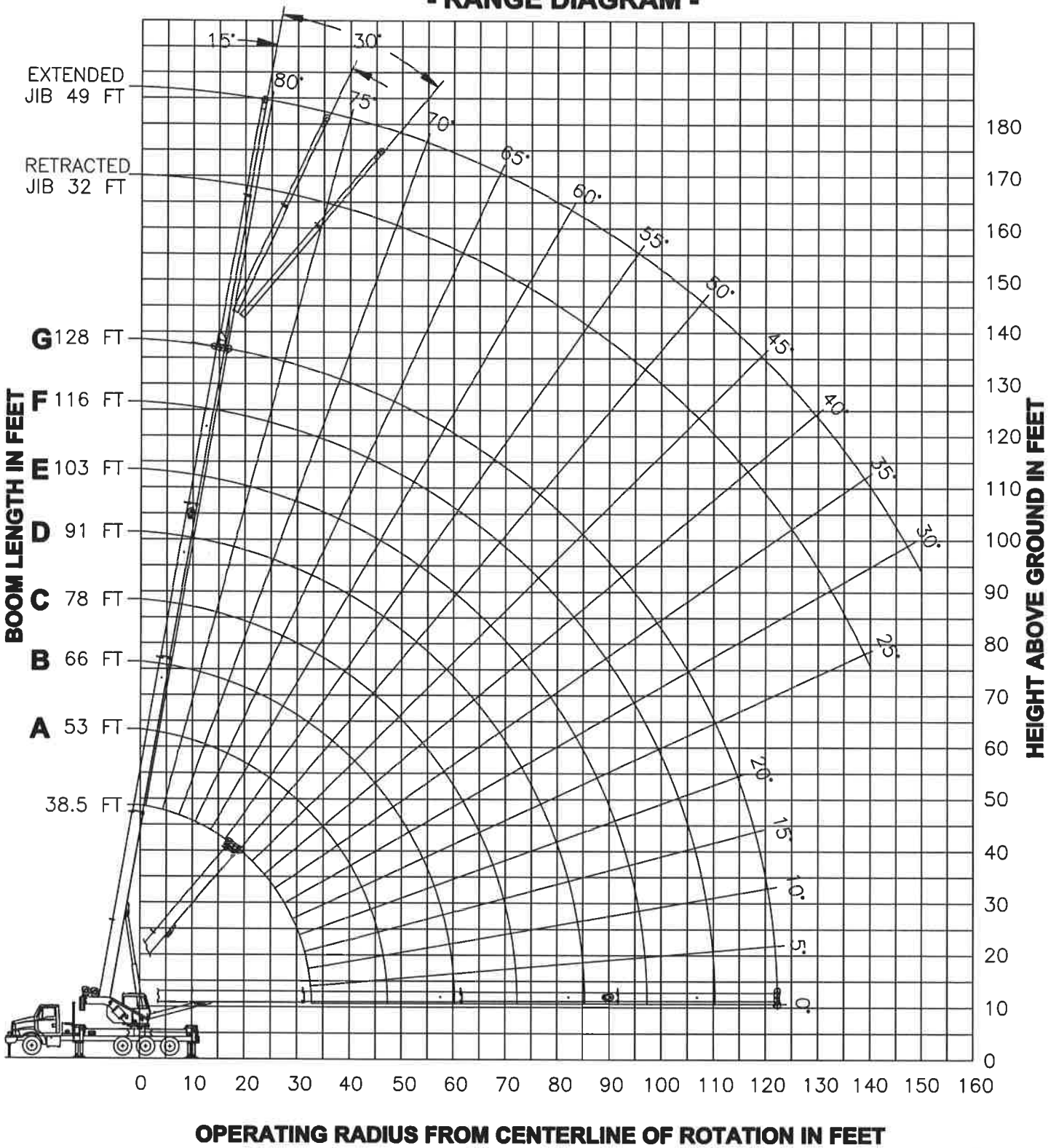
USE THIS CHART ONLY WHEN ALL OUTRIGGER BEAMS ARE FULLY EXTENDED



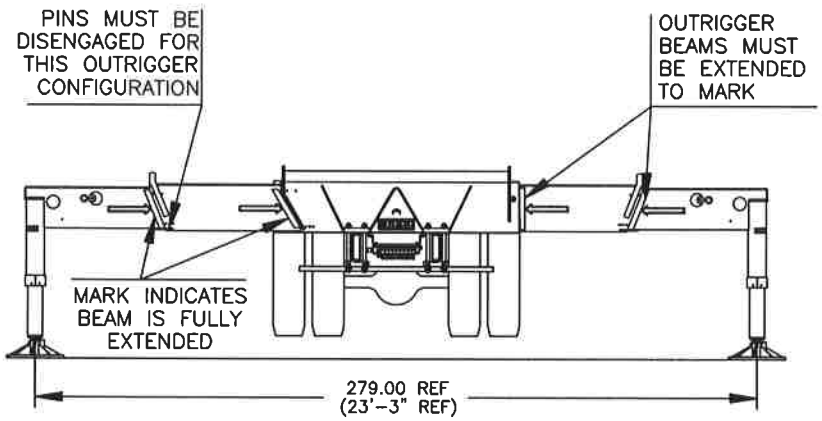
32 FT RETRACTED JIB LIFTING CAPACITIES

	0° OFFSET			15° OFFSET			30° OFFSET		
LOAD RADIUS (FT)	LOADED BOOM ANGLE (DEG)	CODE 7 OVER REAR (LBS)	CODE 8 FULL 360° (LBS)	LOADED BOOM ANGLE (DEG)	CODE 9 OVER REAR (LBS)	CODE 10 FULL 360° (LBS)	LOADED BOOM ANGLE (DEG)	CODE 11 OVER REAR (LBS)	CODE 12 FULL 360° (LBS)
35	78	5400	5400						
40	76.5	5400	5400	79.5	5400	5400			
45	75	5400	5400	78	5400	5400			
50	73.5	5400	5400	76.5	5400	5400	79	5400	5400
55	72	5400	5400	74.5	5400	5400	77	5400	5400
60	70	5400	5400	73	5400	5400	75	5400	5400
65	68.5	5400	5400	71	5400	5400	73	5240	5240
70	66.5	5210	5210	69	5230	5230	71.5	4990	4990
75	64.5	4740	4740	67	4970	4970	69.5	4750	4750
80	62.5	4300	4300	65	4570	4570	67.5	4520	4520
85	60.5	3890	3890	63	4140	4140	65	4310	4310
90	58	3510	3510	61	3740	3740	63	3930	3930
95	55.5	3160	3150	58.5	3360	3360	60.5	3540	3540
100	53	2820	2660	56	3010	2960	58	3170	3170
105	50.5	2520	2220	53.5	2690	2490	55.5	2830	2700
110	48	2230	1830	50.5	2390	2080	52.5	2510	2250
115	45.5	1960	1480	48	2100	1700	49.5	2210	1850
120	42.5	1700	1160	45	1830	1350	46.5	1920	1480
125	39.5	1470	860	42	1580	1030	43	1660	1130
130	36.5	1240		38.5	1350		39.5	1400	
135	32.5	1030		34.5	1120		35.5	1160	
140	28.5	840		30.5	910		30.5	920	
145									

- RANGE DIAGRAM -



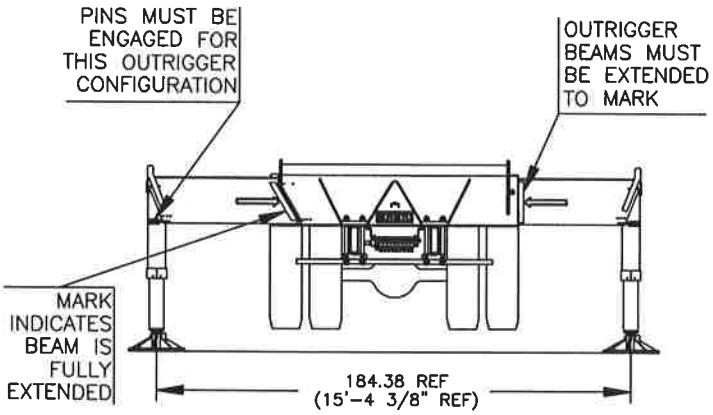
USE THIS CHART ONLY WHEN ALL OUTRIGGER BEAMS ARE FULLY EXTENDED



49 FT EXTENDED JIB LIFTING CAPACITIES

	0° OFFSET			15° OFFSET			30° OFFSET		
LOAD RADIUS (FT)	LOADED BOOM ANGLE (DEG)	CODE 13 OVER REAR (LBS)	CODE 14 FULL 360° (LBS)	LOADED BOOM ANGLE (DEG)	CODE 15 OVER REAR (LBS)	CODE 16 FULL 360° (LBS)	LOADED BOOM ANGLE (DEG)	CODE 17 OVER REAR (LBS)	CODE 18 FULL 360° (LBS)
40	78	4300	4300						
45	76.5	4300	4300						
50	75	4300	4300	79.5	4300	4300			
55	73.5	4300	4300	78	4300	4300			
60	72	4300	4300	76.5	4300	4300	79.5	3700	3700
65	70.5	4300	4300	75	4300	4300	78	3590	3590
70	69	4300	4300	73.5	4230	4230	76	3490	3490
75	67.5	4300	4300	71.5	4080	4080	74	3390	3390
80	66	4240	4240	70	3930	3930	72.5	3300	3300
85	64.5	4030	4030	68.5	3760	3760	70.5	3220	3220
90	63	3740	3740	66.5	3590	3590	69	3140	3140
95	61	3430	3430	64.5	3420	3420	67	3070	3070
100	59	3120	3120	62.5	3270	3270	65	3000	3000
105	57	2840	2820	60.5	3100	3100	63	2940	2940
110	54.5	2560	2420	58	2810	2810	61	2880	2880
115	52	2310	2060	56	2540	2420	58.5	2720	2710
120	49.5	2070	1740	53.5	2280	2070	56	2450	2320
125	47	1840	1440	51	2040	1740	53.5	2190	1970
130	44.5	1630	1170	48	1810	1440	50.5	1940	1640
135	42	1430	920	45.5	1590	1160	47.5	1700	1330
140	39.5	1240		42.5	1390	900	44.5	1480	1040
145	36.5	1060		39.5	1190		41	1260	770
150	33	900		36	1000		37	1050	
155				32	820		32.5	850	
160									

USE THIS CHART ONLY WHEN ALL OUTRIGGER BEAMS ARE IN THE MID POSITION



32 FT RETRACTED JIB LIFTING CAPACITIES

	0° OFFSET		15° OFFSET		30° OFFSET	
		CODE 19		CODE 20		CODE 21
LOAD RADIUS (FT)	LOADED BOOM ANGLE (DEG)	FULL 360° (LBS)	LOADED BOOM ANGLE (DEG)	FULL 360° (LBS)	LOADED BOOM ANGLE (DEG)	FULL 360° (LBS)
35	78	5400				
40	76.5	5400	79.5	5400		
45	75	5400	78	5400		
50	73.5	5400	76.5	5400	79	5400
55	72	4640	74.5	5320	77	5400
60	70	3650	73	4260	75	4780
65	68.5	2830	71	3380	73	3840
70	66.5	2150	69	2640	71.5	3050
75	64.5	1560	67	2000	69.5	2370
80	62.5	1060	65	1460	67.5	1790
85			63	980	65	1280
90						
95						

49 FT EXTENDED JIB LIFTING CAPACITIES

	0° OFFSET		15° OFFSET		30° OFFSET	
		CODE 22		CODE 23		CODE 24
LOAD RADIUS (FT)	LOADED BOOM ANGLE (DEG)	FULL 360° (LBS)	LOADED BOOM ANGLE (DEG)	FULL 360° (LBS)	LOADED BOOM ANGLE (DEG)	FULL 360° (LBS)
40	78	4300				
45	76.5	4300				
50	75	4300	79.5	4300		
55	73.5	4300	78	4300		
60	72	4300	76.5	4300	79.5	3700
65	70.5	3470	75	4270	78	3590
70	69	2770	73.5	3500	76	3490
75	67.5	2180	71.5	2840	74	3390
80	66	1670	70	2270	72.5	2800
85	64.5	1230	68.5	1780	70.5	2250
90	63	840	66.5	1340	69	1770
95			64.5	950	67	1340
100					65	960
105						
110						