LOAD CHARTS for Use in CCO Written Examinations

AMERICAN 5300

This load chart has been adapted from the original manufacturer's load chart for use in CCO written examinations.

It is not to be used for any other purpose.

BOOM LENGTH	RADIUS IN FEET	BOOM ANGLE DEGREES	SIDE FRAMES RETRACTED	SIDE FRAMES EXTENDED	FEET FROM BOOM POINT TO GROUND
	10	80.9		140,000*	45
	12	77.9		140,000*	44
	15	73.5		106,010	44
40'	20	65.9		65,350	42
	25	57.7		46,900	39
	30	48.8		36,390	35
	35	38.4		29,570	30
	40	24.7		24,800	22
	11	80.6		140,000*	50
	12	79.3		140,000*	49
	15	75.4		105,950	49
	20	68.7		65,250	47
45'	25	61.7		46,800	45
	30	54.2		36,280	42
	35	45.8		29,450	37
	40	36.1		24,660	32
	45	23.2		21,140	23
	12	80.4		140,000*	54
	15	76.9		105,930	54
	20	70.9		65,220	52
	25	64.7		46,760	50
50'	30	58.2		36,240	48
	35	51.2		29,400	44
	40	43.4		24,610	39
	45	34.2		21,090	33
	50	22.0		18,400	24
	13	80.2		140,000*	59
	15	78.1		105,860	59
	20	72.7		65,120	58
	25	67.2		46,650	56
55'	30	61.4		36,120	53
	35	55.2		29,280	50
	40	48.6		24,490	46
	45	41.2		20,960	41
	50	32.6	13,250	18,270	35
	55	21.0	11,680	16,110	25
	14	80.1		120,670	64
	15	79.1		105,840	64
	20	74.2		65,090	63
	25	69.2		46,620	61
	30	63.9		36,100	59
60'	35	58.5		29,240	56
	40	52.7		24,450	53
	45	46.4	15,120	20,920	49
	50	39.4	13,220	18,240	43
	55	31.1	11,650	16,080	36
	60	20.1	10,370	14,320	26

BOOM LENGTH	RADIUS IN FEET	BOOM ANGLE DEGREES	SIDE FRAMES RETRACTED	SIDE FRAMES EXTENDED	FEET FROM BOOM POINT TO GROUND
	14	80.8		120,600	69
	15	79.9		105,760	69
	20	75.4		65,000	68
	25	70.8		46,500	67
	30	66.1		35,980	65
65'	35	61.2		29,130	62
	40	56.0		24,330	59
	45	50.5	14,980	20,790	55
	50	44.5	13,090	18,120	51
	55	37.8	11,520	15,960	45
	60	29.9	10,240	14,200	38
	65	19.3	9,160	12,740	27
	15	80.7		105,710	74
	20	76.5		64,930	73
	25	72.2		46,430	72
	30	67.9		35,910	70
	35	63.4		29,050	68
70'	40	58.7	17,390	24,250	65
	45	53.8	14,890	20,710	62
	50	48.5	13,010	18,050	58
	55	42.8	11,440	15,880	53
	60	36.4	10,150	14,120	47
	65	28.8	9,080	12,660	39
	70	18.6	8,170	11,440	27
	16	80.5		93,990	79
	20	77.4		64,820	78
	25	73.5		46,320	77
	30	69.4		35,800	75
	35	65.3		28,930	73
	40	61.0	17,250	24,120	71
75'	45	56.5	14,750	20,580	68
	50	51.8	12,880	17,930	64
	55	46.8	11,300	15,750	60
	60	41.3	10,020	14,000	55
	65	35.1	8,940	12,540	48
	70	27.8	8,030	11,310	40
	75	17.9	7,260	10,270	28
	17	80.4		84,510	84
	20	78.2		64,790	83
	25	74.5		46,290	82
	30	70.8		35,760	81
	35	66.9		28,900	79
80'	40	63.0	17,220	24,100	76
	45	58.9	14,710	20,540	74
	50	54.6	12,850	17,900	70
	55	50.1	11,270	15,730	66
	60	45.2	9,990	13,970	62
	65	39.9	8,920	12,510	56

BOOM LENGTH	RADIUS IN FEET	BOOM ANGLE DEGREES	SIDE FRAMES RETRACTED	SIDE FRAMES EXTENDED	FEET FROM BOOM POINT TO GROUND
	70	34.0	8,010	11,290	50
80'	75	26.9	7,230	10,240	41
	80	17.4	6,560	9,340	29
	17	81.0		84,420	89
	20	78.9		64,690	89
	25	75.5		46,180	87
	30	71.9		35,660	86
	35	68.4	20,400	28,780	84
	40	64.7	17,080	23,970	82
	45	60.9	14,580	20,420	79
85'	50	57.0	12,720	17,780	76
	55	52.8	11,150	15,610	73
	60	48.5	9,860	13,850	69
	65	43.8	8,790	12,390	64
	70	38.7	7,880	11,160	58
	75	32.9	7,100	10,120	51
	80	26.1	6,420	9,210	42
	85	16.8	5,830	8,430	30
	18	80.8		76,670	94
	20	79.5		64,600	94
	25	76.3		46,090	93
	30	73.0		35,570	91
	35	69.2	20,310	28,700	90
	40	66.2	16,980	23,880	87
	45	62.6	14,480	20,330	85
90'	50	59.0	12,630	17,700	82
	55	55.2	11,060	15,530	79
	60	51.2	9,770	13,760	75
	65	47.0	8,700	12,300	71
	70	42.5	7,790	11,080	66
	75	37.5	7,000	10,020	60
	80	32.0	6,320	9,120	53
	85	25.3	5,740	8,340	44
	90	16.4	5,220	7,650	31
	19	80.7		70,050	99
	20	80.1		64,500	99
	25	77.0		45,980	98
	30	73.9		35,460	96
	35	70.7	20,170	28,570	95
	40	67.5	16,850	23,760	93
95'	45	64.2	14,350	20,210	91
	50	60.8	12,500	17,570	88
	55	57.3	10,930	15,410	85
	60	53.6	9,640	13,640	82
	65	49.8	8,560	12,180	78
	70	45.7	7,660	10,950	73
	75	41.3	6,870	9,890	68
	80	36.5	6,190	8,990	62

BOOM LENGTH	RADIUS IN FEET	BOOM ANGLE DEGREES	SIDE FRAMES RETRACTED	SIDE FRAMES EXTENDED	FEET FROM BOOM POINT TO GROUND
	85	31.1	5,600	8,200	54
95'	90	24.6	5,080	7,510	45
	95	15.9	4,610	6,900	31
	20	80.6		64,420	104
	25	77.7		45,900	103
	30	74.7	24,710	35,380	102
	35	71.7	20,100	28,500	100
	40	68.7	16,770	23,680	98
	45	65.6	14,260	20,120	96
	50	62.4	12,430	17,510	94
	55	59.1	10,860	15,330	91
100'	60	55.7	9,560	13,560	88
	65	52.2	8,490	12,110	84
	70	48.4	7,580	10,880	80
	75	44.5	6,790	9,820	75
	80	40.2	6,120	8,920	70
	85	35.6	5,530	8,130	63
	90	30.3	5,000	7,440	56
	95	24.0	4,540	6,820	46
	100	15.5	4,130	6,280	32
	21	80.5		59,540	109
	25	78.3		45,800	108
	30	75.5	24,590	35,280	107
	35	72.6	19,960	28,380	105
	40	69.7	16,630	23,560	104
	45	66.8	14,120	19,990	102
	50	63.8	12,300	17,390	99
	55	60.7	10,720	15,210	97
105'	60	57.5	9,440	13,450	94
	65	54.2	8,360	11,980	90
	70	50.8	7,450	10,750	87
	75	47.2	6,660	9,700	82
	80	43.3	5,980	8,790	77
	85	39.2	5,390	8,000	72
	90	34.7	4,870	7,310	65
	95	29.5	4,410	6,690	57
	100	23.4	3,990	6,140	47
	105	15.1	3,620	5,660	33
	21	80.9		59,460	114
	25	78.8		45,710	113
	30	76.1	24,490	35,190	112
	35	73.4	19,860	28,290	111
110'	40	70.7	16,530	23,460	109
	45	67.9	14,030	19,900	107
	50	65.1	12,200	17,300	105
	55	62.2	10,630	15,120	102
	60	59.2	9,340	13,360	100
	65	56.1	8,260	11,890	96

BOOM LENGTH	RADIUS IN FEET	BOOM ANGLE DEGREES	SIDE FRAMES RETRACTED	SIDE FRAMES EXTENDED	FEET FROM BOOM POINT TO GROUND
	70	52.9	7,350	10,660	93
	75	49.6	6,560	9,600	89
	80	46.0	5,890	8,700	84
	85	42.3	5,300	7,910	79
110'	90	38.3	4,770	7,220	73
	95	33.9	4,300	6,590	66
	100	28.8	3,890	6,050	58
	105	22.9	3,520	5,560	48
	110	14.8	3,190	5,120	33
	22	80.8		55,350	119
	25	79.3		45,590	118
	30	76.8	24,350	35,070	117
	35	74.2	19,720	28,170	116
	40	71.6	16,400	23,350	114
	45	68.9	13,880	19,770	112
	50	66.2	12,070	17,170	110
	55	63.5	10,500	15,000	108
	60	60.7	9,210	13,230	105
115'	65	57.8	8,130	11,760	102
	70	54.8	7,220	10,530	99
	75	51.6	6,430	9,470	95
	80	48.4	5,750	8,570	91
	85	45.0	5,160	7,780	86
	90	41.3	4,630	7,080	81
	95	37.4	4,170	6,460	75
	100	33.1	3,750	5,910	68
	105	28.2	3,380	5,420	59
	110	22.4	3,050	4,980	49
	115	14.5	2,750	4,590	34
	23	80.7		51,620	124
	25	79.7	31,000	45,520	123
	30	77.3	24,290	35,010	122
	35	74.9	19,660	28,110	121
	40	72.4	16,330	23,270	120
	45	69.8	13,820	19,710	118
	50	67.3	12,010	17,110	116
	55	64.7	10,440	14,940	114
120'	60	62.0	9,150	13,170	111
	65	59.3	8,070	11,710	108
	70	56.4	7,160	10,470	105
	75	53.5	6,370	9,410	102
	80	50.5	5,690	8,510	98
	85	47.3	5,100	7,720	93
	90	44.0	4,570	7,020	88
	95	40.4	4,110	6,400	83
	100	36.6	3,690	5,850	77
	105	32.4	3,320	5,360	69

BOOM LENGTH	RADIUS IN FEET	BOOM ANGLE DEGREES	SIDE FRAMES RETRACTED	SIDE FRAMES EXTENDED	FEET FROM BOOM POINT TO GROUND
	110	27.6	2,980	4,910	61
120'	115	21.9	2,680	4,520	50
	120	14.2	2,410	4,160	35
	24	80.6	32,670	48,300	128
	25	80.2	30,870	45,420	128
	30	77.8	24,160	34,900	127
	35	75.5	19,530	28,000	126
	40	73.1	16,200	23,160	125
	45	70.7	13,680	19,580	123
	50	68.2	11,890	17,000	121
	55	65.7	10,310	14,820	119
	60	63.2	9,020	13,050	117
	65	60.6	7,940	11,590	114
125'	70	57.9	7,030	10,350	111
	75	55.2	6,250	9,300	108
	80	52.4	5,560	8,380	104
	85	49.4	4,970	7,590	100
	90	46.3	4,440	6,890	96
	95	43.0	3,980	6,280	90
	100	39.6	3,560	5,730	85
	105	35.8	3,190	5,230	78
	110	31.7	2,850	4,790	71
	115	27.0	2,540	4,390	62
	120	21.4	2,270	4,030	51
	125	13.9	2,020	3,700	35
	24	81.0	32,570	48,200	134
	25	80.5	30,770	45,320	133
	30	78.3	24,060	34,810	132
	35	76.0	19,430	27,900	131
	40	73.8	16,090	23,060	130
	45	71.5	13,580	19,490	128
	50	69.1	11,790	16,910	127
	55	66.7	10,210	14,720	125
	60	64.3	8,920	12,960	122
	65	61.8	7,840	11,490	120
	70	59.3	6,920	10,250	117
130'	75	56.7	6,150	9,200	114
	80	54.0	5,460	8,280	110
	85	51.3	4,870	7,500	107
	90	48.4	4,340	6,790	102
	95	45.4	3,870	6,180	98
	100	42.2	3,460	5,630	92
	105	38.8	3,090	5,140	87
	110	35.1	2,750	4,690	80
	115	31.1	2,440	4,290	72
	120	26.5	2,160	3,920	63
	125	21.0	1,910	3,590	52
	130	13.6	1,680	3,290	36

⚠ WARNING

This rating chart is invalid if the crane has been modified or altered by use of other than GENUINE AMERICAN PARTS as such modifications or alterations may affect its capacity or safe operation. See American Crane Corporation Service Bulletin #259.

Ratings in this chart are in POUNDS and do not exceed the percentage of tipping specified for this crane by ANSI B30.5. All ratings require that the crane be standing level on a firm uniformly supporting surface.

Do not lift loads in excess of those shown on this chart. Lifting loads in excess of those shown or operation not in accordance with good operating practice, including limitations shown on page 3499 of Operator's Manual, can cause tipping, structural damage or catastrophic failure.

On ratings with SIDE FRAMES RETRACTED, boom must never be operated at radii for which no ratings are shown.

Asterisk (*) areas on this chart indicate ratings which are limited by strength of material or factors other than stability (tipping).

" RADIUS IN FEET " is the horizontal distance at ground level from the crane center line of rotation to a vertical line through the center of gravity of the suspended load.

When using the main boom fall with jib in place, the main fall ratings must be reduced by the jib effective weight shown on the jib rating chart plus twice the weight of all suspended blocks, slings, rope, etc., at the jib fall. See Appendix A.

When using the main boom fall with boom tip extension in place, the main fall ratings must be reduced by the weight of the boom tip extension plus twice the weight of all suspended blocks, slings, rope, etc., at the boom tip extension fall. See Appendix A.

Blocks, slings, buckets and other load carrying devices are considered part of the load. The weight of standard hoisting ropes for the rating at a given radius has been calculated as part of the boom point load and need not be considered in determining net allowable loads. See Appendix A.

This chart was developed exclusively for use with a boom only. Under no circumstances are these ratings to be interpreted for use with a jib.

Ratings shown on this chart make no allowance for such factors as out of plumb loads, wind, poor soil conditions and dynamic effects due to excessive operating speeds. The user (operator) must exercise judgement to make allowance for these conditions. See page 3499 of Operator's Manual for detailed information.

No account is taken of the wind force on the load. This effect, which can be substantial for loads with large surface areas, must be considered by the user. In any wind it is strongly recommended that taglines be used to control the load.

BOOM HOIST LINE is 10 parts of 0.625 inch diameter 6 x 26, WS, FW, RAL, IWRC, EIPS wire rope with a minimum breaking strength of 41,200 pounds.

PENDANT SUSPENSION LINE is 2 parts of 1.125 inch diameter MONOLAY wire rope with a minimum breaking strength of 140,600 pounds.

MAIN LOAD LINE is .875 inch diameter 6 X 25, FW, RRL, IWRC, IPS wire rope with a minimum breaking strength of 69,200 pounds.

Erection over the idler end with A-Frame fully raised and idler tumblers blocked. Erection over the side with A-Frame fully raised and side frames extended. Blocks, slings and other load carrying devices must be on the ground during erection.

MAXIMUM BOOM & JIB SELF-ERECTION DATA				
	OVER THE END		OVER THE SIDE	
	BOOM LENGTH (FT)	JIB LENGTH (FT)	BOOM LENGTH (FT)	JIB LENGTH (FT)
#9 JIB	160	0	160	0
	155	20	155	20
	150	40	150	30
	145	50	145	40
			140	50

LOAD HOISTING INFORMATION			
MAXIMUM LIFTING CAPACITY - LBS.	MINIMUM PARTS OF LINE	MAXIMUM HOISTING DISTANCE IN FEET	
		R.H. DRUM - C.L.L.	L.H. DRUM
140,000	8	64	49
138,400	7	74	56
118,620	6	86	65
98,850	5	103	78
79,080	4	129	98
59,310	3	172	131
39,540	2	258	196
19,770	1	517	392

JIB BACKSTAY LINE is 0.875 inch diameter wire rope with a minimum breaking strength of 69,200 pounds.

WHIP-LINE is 0.875 inch diameter 6 x 25, P, RRL, FW, IPS, IWRC wire rope with a minimum breaking strength of 69,200 pounds.

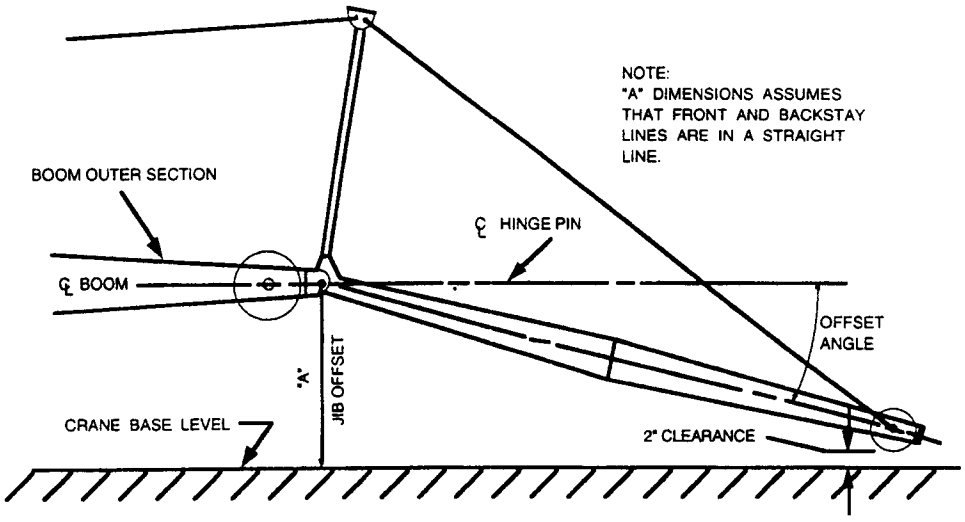
Erection over the idler end with A-Frame fully raised and idler tumblers blocked. Erection over the side with A-Frame fully raised and side frames extended. Blocks, slings and other load carrying devices must be on the ground during erection.

MAXIMUM BOOM & JIB SELF-ERECTION DATA				
	OVER THE END		OVER THE SIDE	
	BOOM LENGTH (FT)	JIB LENGTH (FT)	BOOM LENGTH (FT)	JIB LENGTH (FT)
#9 JIB	160'	0'	160'	0'
	155'	20'	155'	20'
	150'	40'	150'	30'
	145'	50'	145'	40'
			140'	50'

BOOM COMPOSITION CHART						
	BOOM SECTIONS					
BOOM LENGTH (FEET)	20' 46HR INNER	5' 46HR CENTER	10' 46HR CENTER	20' 46HR CENTER	40' 46HR CENTER	20' 46HR OUTER
40	1	0	0	0	0	1
50	1	1	0	0	0	1
50	1	0	1	0	0	1
55	1	1	1	0	0	1
60	1	0	0	1	0	1
65	1	1	0	1	0	1
70	1	0	1	1	0	1
75	1	1	1	1	0	1
80	1	0	0	0	1	1
85	1	1	0	0	1	1
90	1	0	1	0	1	1
95	1	1	1	0	1	1
100	1	0	0	1	1	1
105	1	1	0	1	1	1
110	1	0	1	1	1	1
115	1	1	1	1	1	1
120	1	0	0	0	2	1
125	1	1	0	0	2	1
130	1	0	1	0	2	1
135	1	1	1	0	2	1
140	1	0	0	1	2	1
145	1	1	0	1	2	1
150	1	0	1	1	2	1
155	1	1	1	1	2	1

LOAD HOISTING INFORMATION			
MAXIMUM LIFTING CAPACITY - LBS.	MINIMUM PARTS OF LINE	MAXIMUM HOISTING DISTANCE - FT	
		MAIN DRUM - C.L.L.	AUX. DRUM
18,000	1		396'

#9 JIB COMPOSITION CHART							
JIB LENGTH (FEET)	#9 JIB 10' INNER	#9 JIB 10' CENTER	#9 JIB 10' OUTER	EFF. JIB WEIGHT (POUNDS)	JIB OFFSET "A" IN FEET		
					5°	15°	25°
20	1	0	1	1,550	3.0	6.0	8.5
30	1	1	1	2.100	3.8	7.8	11.6
40	1	2	1	2,800	4.6	9.7	14.5
50	1	3	1	3,600	5.3	11.6	17.8



BOOM LENGTH	RADIUS (FEET)	BOOM ANGLE (DEGREES)	SIDE FRAMES RETRACTED (POUNDS)	SIDE FRAMES EXTENDED (POUNDS)	FROM BOOM POINT TO GROUND (FEET)
90'	19	80.7		70,900	94
(27.4M)	20	80.0		65,350	94
BOOM	25	76.8		46,810	93
	30	73.5		36,280	91
	35	70.1		29,400	90
	40	66.7		24,580	88
	50	59.5	13,330	18,390	83
	60	51.7	10,470	14,450	76
	70	43.0	8,470	11,750	67
	80	32.5	7,010	9,790	53
	90	16.9	5,890	8,310	31
100'	21	80.4		60,450	104
(30.5M)	25	78.1		46,700	103
BOOM	30	75.2		36,160	102
	35	72.2		29,280	100
	40	69.1	17,560	24,450	99
	50	62.8	13,210	18,270	94
	60	56.1	10,330	14,320	88
	70	48.9	8,340	11,620	80
	80	40.7	6,880	9,670	70
	90	30.7	5,760	8,180	56
	100	16.0	4,870	7,020	33
110'	22	80.8		56,300	114
(33.5M)	25	79.2		46,550	113
BOOM	30	76.5		36,010	112
	35	73.8	20,710	29,120	111
	40	71.1	17,370	24,280	109
	50	65.5	13,030	18,110	105
	60	59.6	10,160	14,160	100
	70	53.3	8,170	11,460	93
	80	46.4	6,700	9,500	85
	90	38.7	5,570	8,000	74
	100	29.2	4,690	6,840	59
	110	15.2	3,980	5,900	34

BOOM LENGTH	RADIUS (FEET)	BOOM ANGLE (DEGREES)	SIDE FRAMES RETRACTED (POUNDS)	SIDE FRAMES EXTENDED (POUNDS)	FROM BOOM POINT TO GROUND (FEET)
120'	24	80.6		49,270	124
(36.6M)	25	80.1		46,390	123
BOOM	30	77.7		35,870	122
	35	75.2	20,530	28,950	121
	40	72.7	17,190	24,110	120
	50	67.6	12,850	17,940	116
	60	62.3	9,980	13,990	111
	70	56.8	7,990	11,290	106
	80	50.8	6,520	9,320	98
	90	44.3	5,390	7,830	89
	100	37.0	4,510	6,660	77
	110	28.0	3,790	5,720	61
	120	14.5	3,210	4,960	35
130'	25	80.9		46,260	134
(39.6M)	30	78.6	25,030	35,730	133
BOOM	35	76.4	20,380	28,810	131
	40	74.1	17,030	23,960	130
	50	69.4	12,710	17,810	127
	60	64.7	9,840	13,850	123
	70	59.6	7,830	11,140	117
	80	54.4	6,370	9,170	111
	90	48.7	5,240	7,680	103
	100	42.5	4,360	6,510	93
	110	35.4	3,630	5,560	81
	120	26.8	3,050	4,800	64
	130	13.9	2,570	4,170	36
140'	27	80.7		41,190	143
(42.7M)	30	79.5	24,850	35,580	143
BOOM	35	77.4	20,190	28,650	142
	40	75.3	16,840	23,790	141
	50	71.0	12,530	17,640	137
	60	66.6	9,660	13,680	134
	70	62.0	7,660	10,970	129
	80	57.3	6,180	9,000	123
	90	52.2	5,050	7,500	116
	100	46.8	4,170	6,330	107
	110	40.9	3,450	5,380	97
	120	34.1	2,860	4,610	84
	130	25.8	2,370	3,970	66
	140	13.4	1,960	3,440	38

BOOM LENGTH	RADIUS (FEET)	BOOM ANGLE (DEGREES)	SIDE FRAMES RETRACTED (POUNDS)	SIDE FRAMES EXTENDED (POUNDS)	FROM BOOM POINT TO GROUND (FEET)
150'	28	80.9	27,080	39,110	153
(45.7M)	30	80.2	24,670	35,420	153
BOOM	35	78.2	20,010	28,480	152
	40	76.3	16,650	23,620	151
	50	72.3	12,360	17,480	148
	60	68.2	9,470	13,510	144
	70	64.0	7,470	10,800	140
	80	59.7	6,000	8,830	135
	90	55.1	4,880	7,330	128
	100	50.3	3,990	6,150	121
	110	45.1	3,260	5,200	111
	120	39.4	2,670	4,430	100
	130	32.9	2,180	3,790	87
	140	24.9	1,760	3,240	68
	150	12.9	1,410	2,780	39
160'	30	80.8	24,510	33,950 *	163
(48.8M)	35	79.0	19,840	28,330	162
BOOM	40	77.1	16,500	23,470	161
	50	73.4	12,200	17,330	159
	60	69.7	9,320	13,360	155
	70	65.8	7,310	10,640	151
	80	61.8	5,840	8,670	146
	90	57.6	4,710	7,170	140
	100	53.2	3,820	5,990	133
	110	48.6	3,100	5,040	125
	120	43.6	2,510	4,270	116
	130	38.1	2,010	3,620	104
	140	31.8	1,590	3,070	90
	150	24.1	1,240	2,610	71
	160	12.5	940	2,210	40
170'	31	81.0	23,250	29,020 *	173
(51.8M)	35	79.6	19,660	28,130 *	172
BOOM	40	77.9	16,310	23,300	171
	50	74.4	12,020	17,160	169
	60	70.9	9,130	13,180	166
	70	67.3	7,130	10,470	162
	80	63.6	5,660	8,490	157
	90	59.7	4,520	6,990	152
	100	55.7	3,630	5,810	146
	110	51.5	2,910	4,860	138
	120	47.1	2,320	4,090	130
	130	42.2	1,820	3,430	119
	140	36.9	1,400	2,880	107
	150	30.8	1,040	2,410	92
	160	23.4		2,020	73
	170	12.1		1,620	41

BOOM HOIST LINE is 10 parts of .625 inch diameter 6x26, WS, RRL, P, IWRC, EIPS wire rope with a minimum breaking strength of not less than 41,200 pounds.

BOOM PENDANT SUSPENSION is 2 parts of 1.125 inch diameter MONOLAY wire rope with a minimum breaking strength of not less than 140,600 pounds.

MAIN LOAD LINE is .875 inch diameter 6x25, FW, RRL, P, IWRC, IPS wire rope with a minimum breaking strength of 69,200 pounds.

ERECTION

Erection over the idler end is with A-Frame fully raised and idler tumblers blocked. Erection over the side is with A-Frame fully raised and side frames extended. Blocks, slings and other load carrying devices must be on the ground during erection.

	MAXIMUM BOOM & JIB SELF-ERECTION DATA			
	OVER THE END		OVER THE SIDE	
	BOOM LENGTH	JIB LENGTH	BOOM LENGTH	JIB LENGTH
#7HL Jib	170'	60'	170'	60'

LOAD HOISTING INFORMATION - 7/8 inch diameter IPS wire rope			
MAXIMUM LIFTING CAPACITY - LBS.	MINIMUM PARTS OF LINE	MAXIMUM HOISTING DISTANCE - FT.	
		MAIN - R.H.	AUX. - L.H.
140,000	8	64'	49'
138,400	7	73'	56'
118,620	6	85'	65'
98,850	5	102'	78'
79,080	4	128'	98'
59,310	3	171'	131'
39,540	2	256'	196'
19,770	1	512'	392'

American Crane Corporation
Wilmington, North Carolina 28412

#7HL Jib Ratings In Pounds
Model 5300 Crawler Crane
47H Tubular Boom - With 4 Sheave Tip
40,000 Pound Counterweight

BOOM & JIB LENGTH	JIB RADIUS (FEET)	5° JIB OFFSET		15° JIB OFFSET		25° JIB OFFSET	
		BOOM ANGLE	RATINGS (LBS)	BOOM ANGLE	RATINGS (LBS)	BOOM ANGLE	RATINGS (LBS)
	24	80.8	16,000*				
	25	80.3	16,000*				
30'	30	77.6	16,000*	80.2	16,000*		
JIB	35	75.0	16,000*	77.5	16,000*	80.0	16,000*
&	40	72.3	16,000*	74.8	16,000*	77.2	16,000*
80'	50	66.7	16,000*	69.2	16,000*	71.5	16,000*
BOOM	60	60.9	14,560	63.4	14,560	65.6	14,560
	70	54.7	11,870	57.1	11,870	59.2	11,870
	80	48.0	9,920	50.3	9,920	52.3	9,920
	26	80.6	16,000*				
	30	78.7	16,000*				
30'	35	76.2	16,000*	78.6	16,000*	80.8	16,000*
JIB	40	73.8	16,000*	76.1	16,000*	78.3	16,000*
&	50	68.7	16,000*	71.1	16,000*	73.2	16,000*
90'	60	63.5	14,370	65.8	14,370	67.9	14,370
BOOM	70	58.0	11,670	60.3	11,680	62.2	11,680
	80	52.2	9,710	54.4	9,710	56.2	9,720
	90	45.8	8,230	47.9	8,230	49.6	8,230
	27	80.9	16,000*				
	30	79.5	16,000*				
30'	35	77.3	16,000*	79.5	16,000*		
JIB	40	75.0	16,000*	77.2	16,000*	79.3	16,000*
&	50	70.4	16,000*	72.6	16,000*	74.6	16,000*
100'	60	65.7	14,200	67.8	14,200	69.7	14,200
BOOM	70	60.7	11,500	62.8	11,500	64.7	11,500
	80	55.5	9,540	57.6	9,540	59.4	9,540
	90	50.0	8,060	52.0	8,060	53.6	8,060
	100	43.9	6,890	45.8	6,890	47.3	6,890
	29	80.7	16,000*				
	30	80.3	16,000*				
	35	78.2	16,000*	80.3	16,000*		
30'	40	76.1	16,000*	78.2	16,000*	80.1	16,000*
JIB	50	71.9	16,000*	73.9	16,000*	75.8	16,000*
&	60	67.5	14,000	69.5	14,000	71.3	14,000
110'	70	63.0	11,300	65.0	11,300	66.7	11,300
BOOM	80	58.3	9,350	60.2	9,350	61.9	9,350
	90	53.3	7,850	55.2	7,850	56.8	7,860
	100	48.0	6,680	49.8	6,680	51.3	6,690
	110	42.2	5,740	43.9	5,740	45.3	5,750
	30	80.9	16,000*				
30'	35	79.0	16,000*	80.9	16,000*		
JIB	40	77.1	16,000*	79.0	16,000*	80.8	16,000*
&	50	73.1	16,000*	75.0	16,000*	76.8	16,000*
120'	60	69.1	13,800	71.0	13,810	72.7	13,810
BOOM	70	64.9	11,110	66.8	11,110	68.4	11,110

BOOM & JIB LENGTH	JIB RADIUS (FEET)	5° JIB OFFSET		15° JIB OFFSET		25° JIB OFFSET	
		BOOM ANGLE	RATINGS (LBS)	BOOM ANGLE	RATINGS (LBS)	BOOM ANGLE	RATINGS (LBS)
30' JIB & 120' BOOM	80	60.6	9,140	62.4	9,150	64.0	9,150
	90	56.1	7,650	57.9	7,650	59.4	7,650
	100	51.4	6,480	53.1	6,480	54.6	6,480
	110	46.3	5,540	48.0	5,540	49.3	5,540
	120	40.6	4,770	42.3	4,770	43.5	4,770
30' JIB & 130' BOOM	32	80.8	16,000*				
	35	79.7	16,000*				
	40	77.9	16,000*	79.7	16,000*		
	50	74.2	16,000*	76.0	16,000*	77.6	16,000*
	60	70.5	13,630	72.2	13,630	73.8	13,640
	70	66.6	10,930	68.3	10,930	69.9	10,930
	80	62.6	8,960	64.3	8,960	65.9	8,970
	90	58.5	7,480	60.2	7,480	61.7	7,480
	100	54.2	6,310	55.9	6,310	57.3	6,310
	110	49.6	5,360	51.2	5,370	52.6	5,370
	120	44.7	4,580	46.3	4,590	47.5	4,590
	130	39.3	3,940	40.8	3,940	41.9	3,940
30' JIB & 140' BOOM	33	81.0	16,000*				
	35	80.3	16,000*				
	40	78.6	16,000*	80.3	16,000*		
	50	75.2	16,000*	76.8	16,000*	78.4	16,000*
	60	71.6	13,440	73.3	13,440	74.8	13,440
	70	68.1	10,740	69.7	10,740	71.2	10,740
	80	64.4	8,770	66.0	8,770	67.4	8,770
	90	60.6	7,280	62.2	7,280	63.6	7,280
	100	56.6	6,100	58.2	6,100	59.5	6,110
	110	52.4	5,160	54.0	5,160	55.3	5,160
	120	48.0	4,380	49.5	4,380	50.8	4,380
	130	43.3	3,740	44.7	3,740	45.9	3,740
	140	38.0	3,180	39.5	3,180	40.5	3,190
30' JIB & 150' BOOM	35	80.9	16,000*				
	40	79.2	16,000*	80.8	15,790*		
	50	76.0	16,000*	77.6	15,250*	79.0	13,530*
	60	72.7	13,240	74.3	13,240	75.7	13,220*
	70	69.3	10,530	70.9	10,540	72.3	10,540
	80	65.9	8,570	67.4	8,570	68.8	8,570
	90	62.4	7,070	63.9	7,080	65.2	7,080
	100	58.7	5,900	60.2	5,900	61.5	5,900
	110	54.9	4,960	56.3	4,960	57.6	4,960
	120	50.9	4,190	52.3	4,190	53.5	4,190
	130	46.6	3,540	48.0	3,540	49.1	3,540
	140	42.0	2,990	43.4	2,990	44.4	2,990
	150	36.9	2,510	38.2	2,510	39.2	2,510
30' JIB & 160' BOOM	37	80.7	15,620*				
	40	79.8	15,360*				
	50	76.7	14,400*	78.2	12,880*	79.6	11,440*
	60	73.6	13,070	75.1	12,270*	76.5	11,140*
	70	70.5	10,360	71.9	10,360	73.3	10,370

BOOM & JIB LENGTH	JIB RADIUS (FEET)	5° JIB OFFSET		15° JIB OFFSET		25° JIB OFFSET	
		BOOM ANGLE	RATINGS (LBS)	BOOM ANGLE	RATINGS (LBS)	BOOM ANGLE	RATINGS (LBS)
	40	80.8	15,620*				
	50	77.9	14,740*	80.3	12,370*		
	60	75.0	13,360	77.3	11,960*	79.6	10,210*
50'	70	72.0	10,640	74.3	10,640	76.5	10,060*
JIB	80	68.9	8,680	71.3	8,680	73.4	8,680
&	90	65.8	7,180	68.1	7,180	70.2	7,190
150'	100	62.6	6,010	64.9	6,010	67.0	6,010
BOOM	110	59.3	5,060	61.6	5,060	63.6	5,070
	120	55.9	4,290	58.1	4,290	60.1	4,290
	130	52.3	3,640	54.5	3,640	56.4	3,640
	140	48.5	3,090	50.7	3,090	52.5	3,090
	150	44.5	2,620	46.7	2,620	48.4	2,620
	41	81.0	13,250*				
	50	78.5	12,460*	80.8	10,470*		
	60	75.7	11,680*	78.0	10,080*	80.1	8,600*
	70	72.9	10,470	75.1	9,630*	77.2	8,430*
50'	80	70.0	8,500	72.2	8,500	74.3	8,150*
JIB	90	67.0	7,000	69.2	7,000	71.3	7,000
&	100	64.0	5,820	66.2	5,830	68.2	5,830
160'	110	60.9	4,880	63.1	4,880	65.0	4,880
BOOM	120	57.7	4,110	59.9	4,110	61.8	4,110
	130	54.4	3,450	56.5	3,460	58.4	3,460
	140	50.9	2,900	53.0	2,900	54.8	2,910
	150	47.3	2,420	49.3	2,420	51.0	2,430
	160	43.4	2,010	45.4	2,010	47.0	2,020
	43	80.9	11,130*				
	50	79.0	10,580*				
	60	76.4	9,830*	78.5	8,470*	80.6	7,250*
	70	73.7	9,100*	75.8	8,060*	77.8	7,040*
50'	80	70.9	8,300	73.1	7,620*	75.0	6,780*
JIB	90	68.1	6,810	70.3	6,810	72.2	6,490*
&	100	65.3	5,630	67.4	5,630	69.3	5,640
170'	110	62.4	4,680	64.4	4,680	66.3	4,680
BOOM	120	59.4	3,900	61.4	3,910	63.2	3,910
	130	56.3	3,250	58.3	3,250	60.1	3,260
	140	53.0	2,700	55.1	2,700	56.8	2,700
	150	49.7	2,230	51.6	2,230	53.3	2,230
	160	46.1	1,790	48.1	1,790	49.6	1,790
	170	42.3	1,360	44.2	1,360	45.7	1,360
	42	80.9	13,900*				
60'	50	78.7	13,220*				
JIB	60	75.9	12,290*	78.7	10,400*		
&	70	73.1	10,680	75.8	9,840*	78.3	8,650*
150'	80	70.2	8,720	72.9	8,720	75.4	8,300*
BOOM	90	67.3	7,220	69.9	7,220	72.4	7,220
	100	64.3	6,040	66.9	6,050	69.3	6,050

#7HL Jib Ratings In Pounds
Model 5300 Crawler Crane
47H Tubular Boom - With 4 Sheave Tip
40,000 Pound Counterweight

BOOM & JIB LENGTH	JIB RADIUS (FEET)	5° JIB OFFSET		15° JIB OFFSET		25° JIB OFFSET	
		BOOM ANGLE	RATINGS (LBS)	BOOM ANGLE	RATINGS (LBS)	BOOM ANGLE	RATINGS (LBS)
60'	110	61.2	5,090	63.8	5,090	66.1	5,100
JIB	120	58.0	4,320	60.6	4,320	62.9	4,320
&	130	54.6	3,660	57.2	3,670	59.4	3,670
150'	140	51.2	3,110	53.7	3,110	55.9	3,120
BOOM	150	47.5	2,640	50.0	2,640	52.1	2,650
	44	80.8	12,160*				
	50	79.3	11,700*				
	60	76.6	10,920*	79.2	9,170*		
	70	73.9	10,210*	76.5	8,800*	78.9	7,460*
60'	80	71.1	8,520	73.7	8,420*	76.1	7,290*
JIB	90	68.4	7,030	70.9	7,030	73.3	7,030
&	100	65.5	5,850	68.0	5,850	70.4	5,860
160'	110	62.6	4,910	65.1	4,910	67.4	4,910
BOOM	120	59.6	4,130	62.1	4,140	64.3	4,140
	130	56.5	3,480	58.9	3,480	61.1	3,490
	140	53.3	2,930	55.7	2,930	57.8	2,930
	150	49.9	2,460	52.3	2,460	54.3	2,460
	160	46.3	2,050	48.7	2,050	50.6	2,050
	45	81.0	10,260*				
	50	79.7	9,910*				
	60	77.2	9,190*	79.7	7,710*		
	70	74.6	8,520*	77.1	7,360*	79.4	6,240*
	80	72.0	7,930*	74.5	6,990*	76.8	6,060*
60'	90	69.4	6,840	71.8	6,580*	74.1	5,820*
JIB	100	66.6	5,660	69.1	5,660	71.3	5,560*
&	110	63.9	4,720	66.3	4,720	68.5	4,720
170'	120	61.1	3,930	63.4	3,930	65.6	3,940
BOOM	130	58.1	3,280	60.5	3,280	62.6	3,280
	140	55.1	2,730	57.5	2,730	59.5	2,730
	150	52.0	2,250	54.3	2,260	56.3	2,260
	160	48.7	1,830	51.0	1,840	52.9	1,840
	170	45.2	1,400	47.5	1,410	49.3	1,410

"RADIUS IN FEET" is the horizontal distance at ground level from the center pin to a vertical line through the center of gravity of the suspended load

The weight of all suspended blocks, slings, or other load carrying devices including those at the main fall, are considered part of the jib load. The weight of standard hoisting ropes for the rating at a given radii has been calculated as part of the jib point dead load and need not e considered in determining net allowable loads.

Ratings shown on this chart make no allowance for such factors as the effect of freely suspended loads, wind, ground conditions, and operating speeds. The user, therefore shall reduce ratings in order to take these conditions into account.

When using the main boom fall with the jib in place, the main fall ratings must be reduced by the jib effective weight shown on the jib composition chart and the weight of all suspended blocks, slings, etc., at the main fall and twice the weight of any such devices at the jib fall. All load carrying devices are considered part of the load.

Jib backstay line is .875" diameter wire rope with a minimum breaking strength of not less than 69,200 pounds.

Whipline is .75" diameter 6 x 25, P, RRL, FW, EIPS, IWRC wire rope with a minimum breaking strength of not less than 79,600 pounds.

Erection over the idler end with A-frame fully raised and idler tumblers blocked. Erection over the side with A-frame fully raised and side frames extended. Blocks, slings, and other load carrying devices must be on the ground during erection.

Crane will self-erect 170' of boom with 60' of 7HL jib over the side and over the end.

Note: The weight of the minimum parts of line required to lift the rated load has already been considered in this chart. It need not be added to the load. This applies only to the load fall being used. If additional parts of line are reeved beyond the minimum required to handle a rated load, or if a second fall is in place but not used, the weight of these ropes should be added to the weight lifted.

JIB BACKSTAY LINE is 0.875 inch diameter wire rope with a minimum breaking strength of 69,200 pounds.

WHIP-LINE is 0.75 inch diameter of 6 x 25, P, RRL, FW, EIPS, IWRC wire rope with a minimum breaking strength of 58,800 pounds.

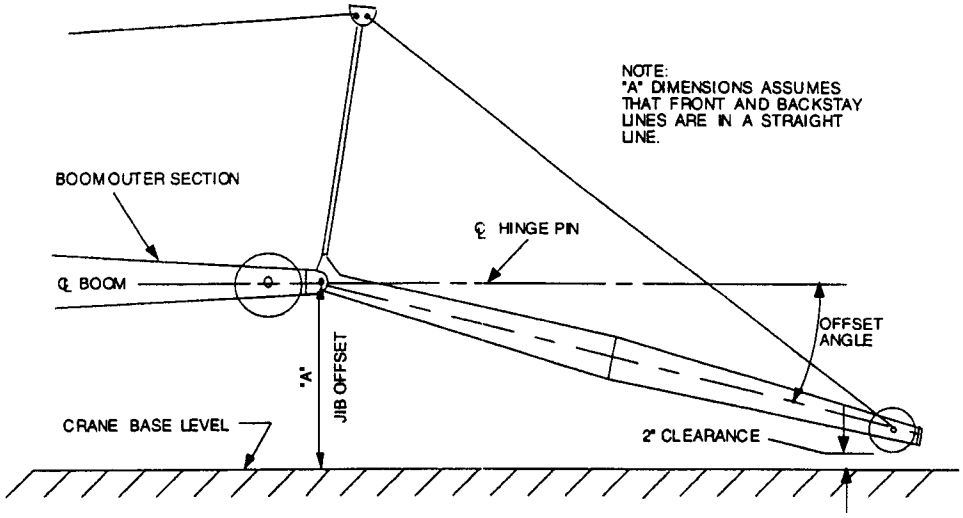
Erection over the idler end with A-Frame fully raised and idler tumblers blocked. Erection over the side with A-Frame fully raised and side frames extended. Blocks, slings and other load carrying devices must be on the ground during erection.

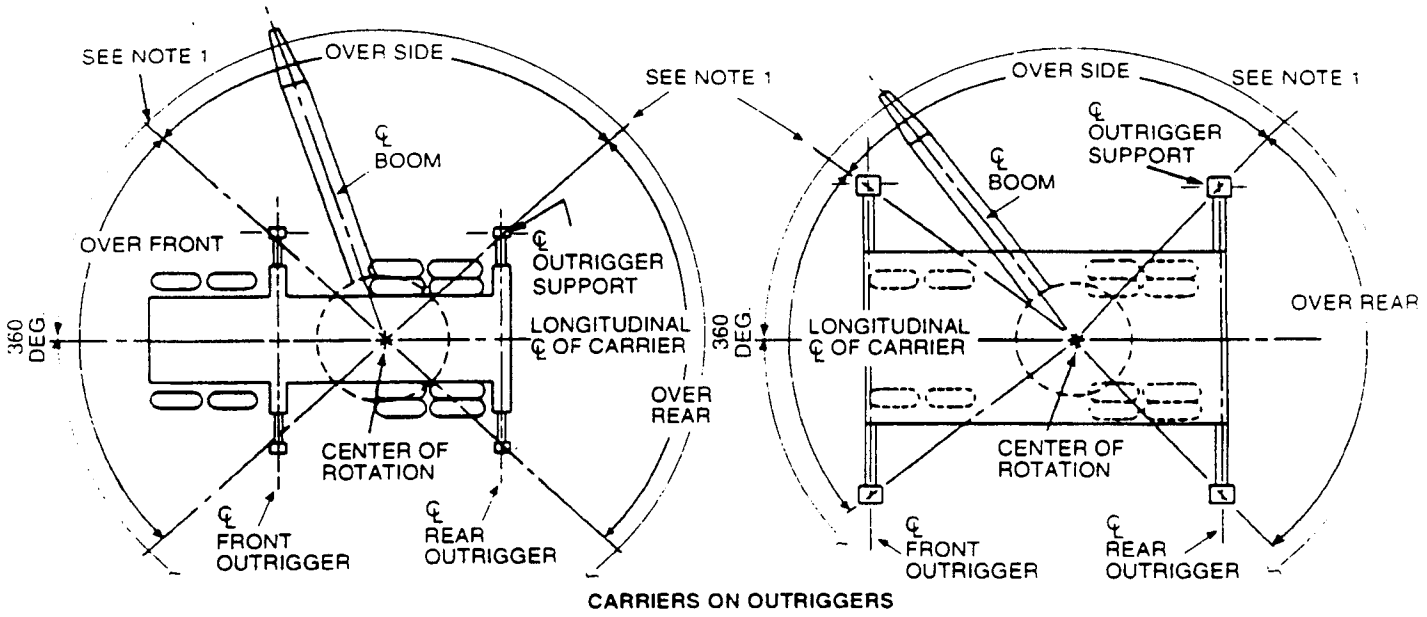
Crane will self-erect 170' of boom with 60' of 7HL Jib over the side and over the end.

BOOM COMPOSITION CHART					
	BOOM SECTIONS				
BOOM LENGTH (FEET)	20' 47H INNER	10' 47H CENTER	20' 47H CENTER	30' 47H CENTER	20' 47H OUTER
40	1	0	0	0	1
50	1	1	0	0	1
60	1	0	1	0	1
70	1	0	0	1	1
80	1	1	0	1	1
90	1	0	1	1	1
100	1	0	0	2	1
110	1	1	0	2	1
120	1	0	1	2	1
130	1	0	0	3	1
140	1	1	0	3	1
150	1	0	1	3	1
160	1	0	0	4	1
170	1	1	0	4	1

LOAD HOISTING INFORMATION			
MAXIMUM LIFTING CAPACITY - LBS.	MINIMUM PARTS OF LINE	MAXIMUM HOISTING DISTANCE - FT	
		MAIN DRUM - C.L.L.	AUX. DRUM
16,000	1		635'

#7HL JIB COMPOSITION CHART								
JIB LENGTH (FEET)	10' INNER	10' CENTER	20' CENTER	20' OUTER	EFF. JIB WEIGHT (POUNDS)	JIB OFFSET "A" IN FEET		
						5°	15°	25°
30	1	0	0	1	1,400	3.84'	7.67'	11.33'
40	1	1	0	1	1,950	4.50'	9.50'	14.33'
50	1	0	1	1	2,630	5.17'	11.50'	17.58'
60	1	1	1	1	2,950	5.75'	13.25'	20.58'

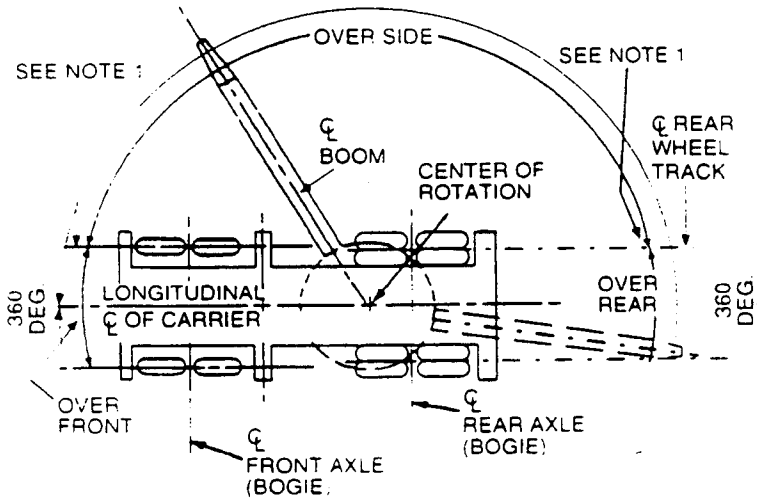




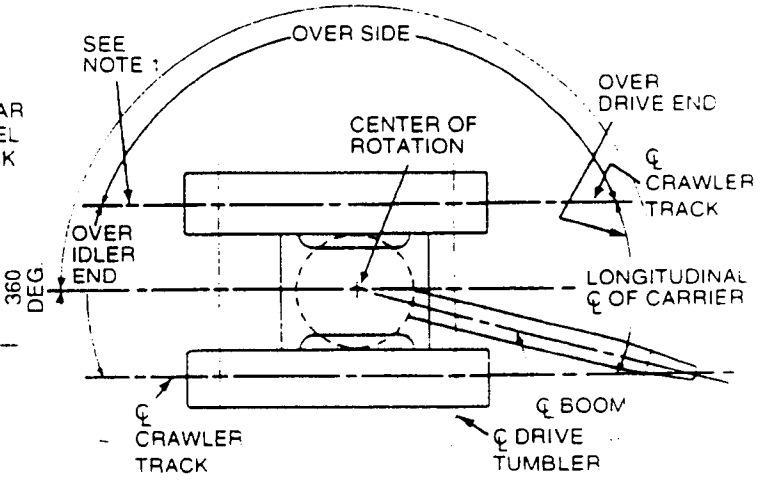
CARRIERS ON OUTRIGGERS

FRONT OUTRIGGER BEHIND FRONT WHEELS

FRONT OUTRIGGER AHEAD OF FRONT WHEELS



CARRIER ON TIRES



CRAWLER TYPE LOWER

WORKING AREA DEFINITIONS

NOTE 1

These lines determine the limiting position of any load for operation within working areas indicated.