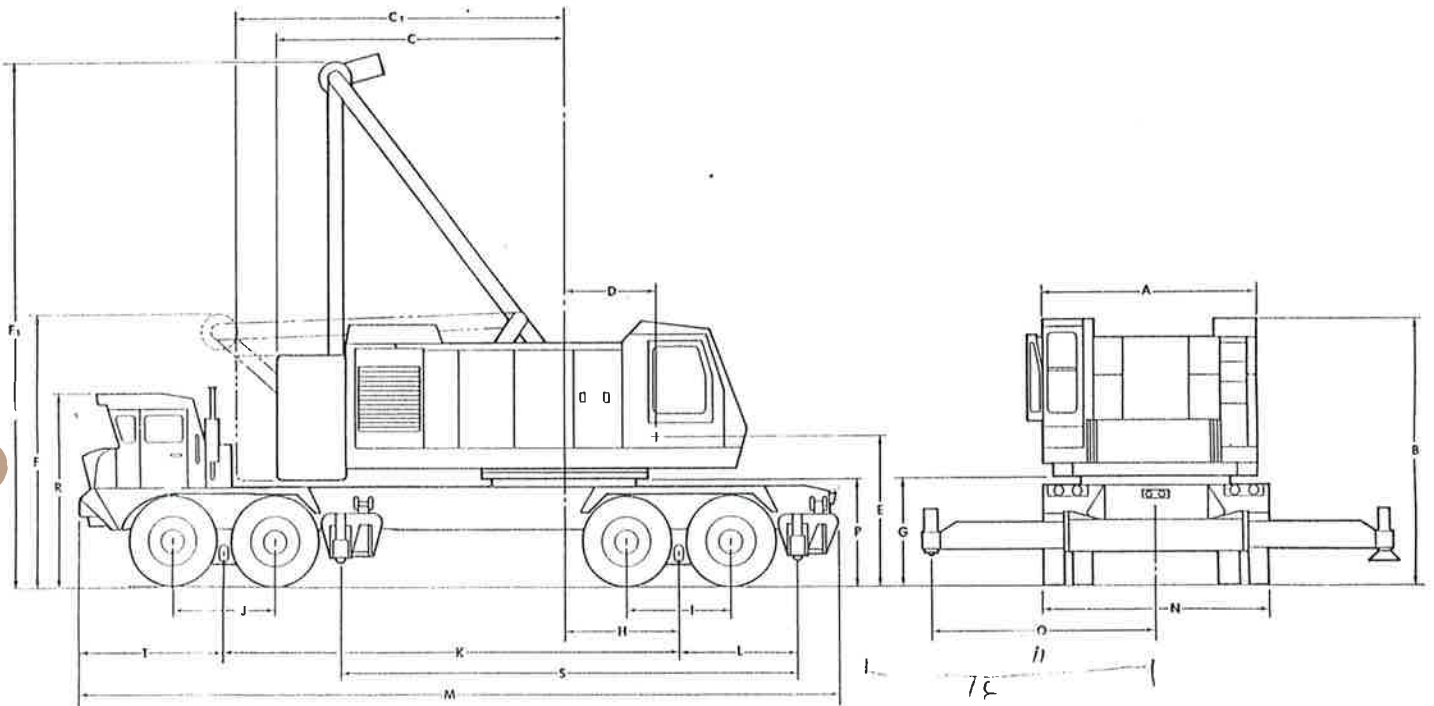




# 8460 CARRIER SPECIFICATION

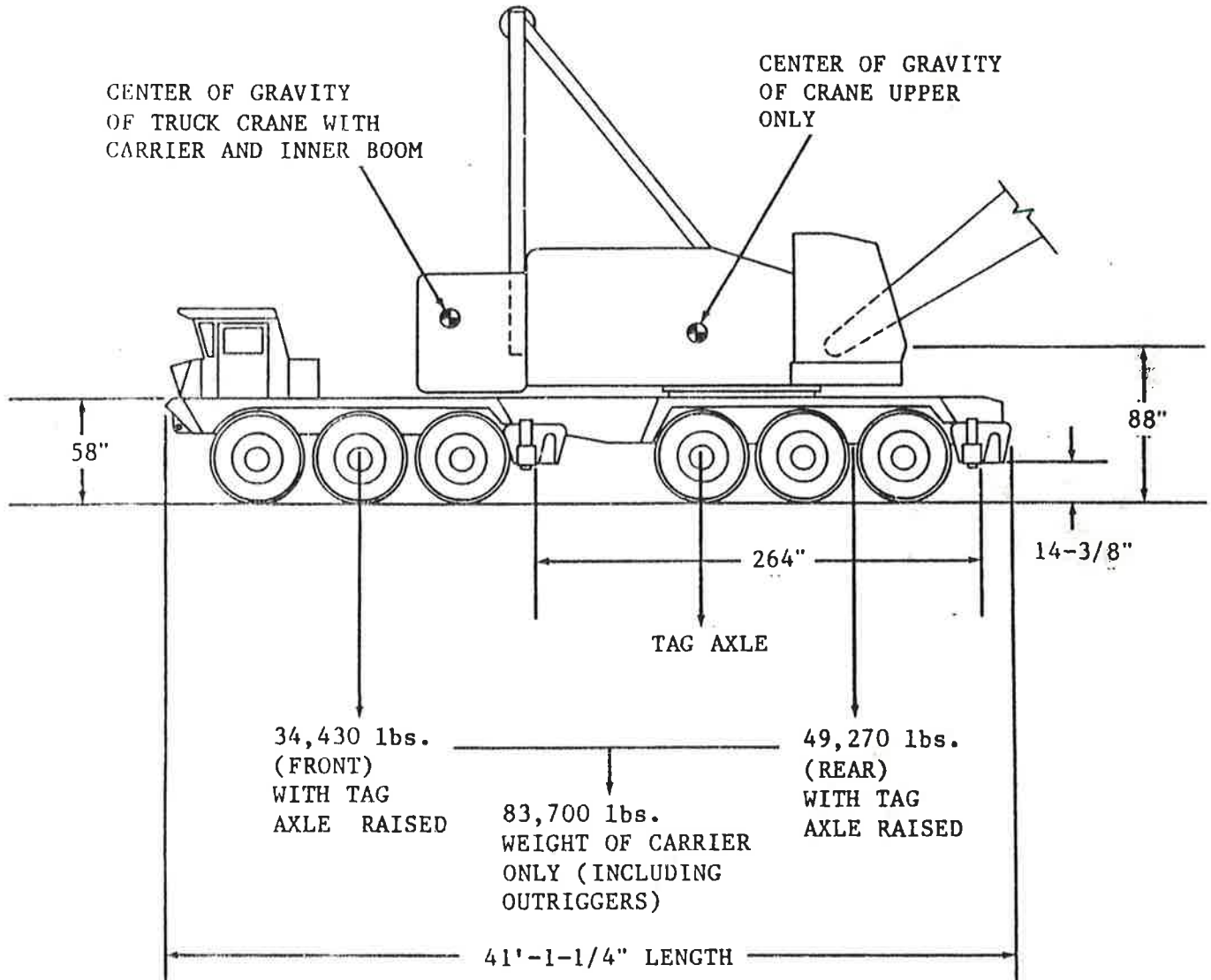


## GENERAL DIMENSIONS

A.	Width of cab	10' 4"	K.	Centerline of rear bogie to centerline of front bogie	22' 0"
B.	Height to top of cab	13' 0"	L.	Centerline of rear bogie to centerline of rear outrigger	6' 3-3/4"
C.	Tailswing - Cwt. Retracted	14' 0"	M.	Overall length	37' 1-3/4"
C <sub>1</sub> .	Tailswing - Cwt. Extended	16' 0"	N.	Overall width	11' 0"
D.	Centerline of rotation to centerline of boom foot	4' 6"	O.	Outriggers extended	11' 0"
E.	Ground to centerline boom foot	7' 2-3/4"	P.	Height over mounting plate	5' 0-1/2"
F.	Height over A-Frame (lowered)	13' 2"	R.	Height over carrier cab	9' 4"
F <sub>1</sub> .	Height over A-Frame (raised)	25' 2"	S.	Centerline of rear outrigger to centerline of front outrigger	22' 0"
G.	Ground to bottom of counterweight	5' 3-1/2"	T.	Distance from Front Bogie to Front Bumper	7' 2-1/2"
H.	Centerline of rotation to centerline of rear bogie	5' 6"		Turning radius	65' 0"
I.	Distance between rear axles	5' 0"		Clearance (under rear equalizing beam)	7-1/2"
J.	Distance between front axles	5' 0"		Clearance (under rear differential)	12"

GENERAL DIMENSIONS FOR MODEL 8450  
WITH 6-AXLE CARRIER

CARRIER S/N 2066



TM0160162-1



# MODEL 8460

## 165 TON TRUCK CRANE

### 77L HAMMERHEAD BOOM RATINGS

With 68,000 Lb "A-B" Counterweight Extended

Boom Length	Radius In Feet	Boom Angle Degrees	Outriggers Set		Ft. From Boom Point
			Over Side	Over Rear	
50 feet	13	83.2	330000	330000	58
	14	82.0	300000	300000	58
	15	80.8	288350	300000	57
	20	75.0	230900	238040	56
	25	69.0	190390	190390	55
	30	62.8	140010	158750	52
	35	56.0	109070	125710	49
	40	48.7	88720	101810	45
50	29.7	63660	72770	32	
60 feet	15	82.4	287020	300000	68
	20	77.6	230460	237880	67
	25	72.6	188720	190260	65
	30	67.6	140270	158650	63
	35	62.3	109260	125950	61
	40	56.7	88860	101990	58
	50	44.1	63790	72930	49
60	26.9	48890	55870	35	
70 feet	16	82.6	272070	297150	77
	20	79.3	229820	237730	77
	25	75.2	186600	190120	76
	30	70.9	139550	158550	74
	35	66.5	109330	126060	72
	40	62.0	88890	102040	70
	50	52.1	63810	72970	63
	60	40.6	48940	55940	53
70	24.7	39010	44660	37	
80 feet	17	82.8	259020	279550	87
	20	80.7	229110	237580	87
	25	77.1	184360	189990	86
	30	73.4	138400	158450	85
	35	69.6	109260	126020	83
	40	65.7	88780	101960	81
	50	57.6	63670	72840	75
	60	48.5	48810	55820	68
	70	37.8	38880	44550	57
	80	23.0	31790	36540	39
90 feet	18	83.0	247550	263790	97
	20	81.7	228330	237430	97
	25	78.5	182070	189860	96
	30	75.3	137220	158360	95
	35	71.9	108940	125950	94
	40	68.6	88630	101840	92
	50	61.5	63500	72700	87
	60	54.0	48640	55670	81
	70	45.5	38720	44390	72
	80	35.5	31640	36400	60
90	21.6	26390	30480	41	
100 feet	20	82.5	203450	237460	107
	25	79.7	162800	189900	106
	30	76.8	135210	158260	105
	35	73.8	108520	126200	104
	40	70.8	88870	102080	102
	50	64.6	63750	72950	98
	60	58.0	48930	55960	93
	70	51.0	39010	44690	85
80	43.0	31940	36700	76	
90	33.6	26760	30850	63	
100	20.4	22600	26190	42	
110 feet	21	82.7	192150	224670	117
	25	80.6	161470	189790	117

Boom Length	Radius In Feet	Boom Angle Degrees	Outriggers Set		Ft. From Boom Point
			Over Side	Over Rear	
110 feet (cont.)	30	78.0	133980	158170	116
	35	75.3	107490	126080	114
	40	72.6	88490	101910	113
	50	67.1	63520	72740	109
	60	61.3	48700	55740	104
	70	55.1	38750	44440	98
	80	48.4	31680	36450	90
	90	40.9	26530	30630	80
	100	31.9	22390	25990	66
	110	19.4	19060	22270	44
120 feet	22	82.8	181640	212480	127
	25	81.4	160110	189680	127
	30	79.0	132980	158070	126
	35	76.5	106660	125930	125
	40	74.1	87920	101710	123
	50	69.1	63280	72510	120
	60	63.8	48440	55500	116
	70	58.4	38490	44190	110
	80	52.5	31420	36190	103
	90	46.2	26280	30390	94
	100	39.0	22160	25760	83
	110	30.5	18850	22060	68
	120	18.5	16120	19010	45
130 feet	23	82.9	172390	200460	137
	25	82.1	158720	189570	137
	30	79.8	131760	157980	136
	35	77.6	105820	125760	135
	40	75.3	87380	101720	134
	50	70.7	63000	72240	131
	60	66.0	48150	55220	127
	70	61.1	38180	43890	122
	80	55.9	31090	35880	115
	90	50.3	25980	30090	108
	100	44.3	21850	25460	98
	110	37.4	18540	21760	87
	120	29.2	15840	18730	71
130	17.8	13570	16200	47	
140 feet	25	82.6	157290	187440	147
	30	80.6	130520	157880	146
	35	78.5	104940	125570	145
	40	76.4	86610	101510	144
	50	72.2	62720	71980	141
	60	67.8	47860	54940	138
	70	63.3	37880	43590	133
	80	58.6	30780	35570	127
	90	53.7	25680	29800	121
	100	48.4	21550	25170	112
	110	42.6	18240	21460	102
	120	36.0	15540	18440	90
	130	28.1	13280	15920	73
140	17.1	11350	13770	48	
150 feet	26	82.7	144050	144050	157
	30	81.2	129910	142380	156
	35	79.3	104250	125510	155
	40	77.3	86210	101460	154
	50	73.4	62680	71940	152
	60	69.4	47840	54910	148
	70	65.2	37860	43570	144
	80	60.9	30770	35560	139
	90	56.4	25690	29810	133

Boom Length	Radius In Feet	Boom Angle Degrees	Outriggers Set		Ft. From Boom Point
			Over Side	Over Rear	
150 feet (cont.)	100	51.7	21560	25180	126
	110	46.6	18270	21490	117
	120	41.0	15570	18470	106
	130	34.7	13310	15950	93
	140	27.1	11400	13820	76
	150	16.5	9760	11990	50
	160 feet	27	82.8	132850	132850
30		81.7	128720	132850	166
35		79.9	103390	125350	166
40		78.1	85470	101270	165
50		74.4	62020	71670	162
60		70.7	47550	54640	159
70		66.9	37550	43280	155
80		62.9	30440	35240	150
90		58.8	25390	29510	145
100		54.5	21250	24870	138
110		49.9	17950	21170	130
120		45.0	15250	18150	121
130		39.7	13000	15640	110
140	33.6	11090	13520	96	
150	26.2	9450	11690	78	
160	15.9	8030	10110	51	
170 feet	28	82.9	122330	122330	177
	30	82.2	122330	122330	176
	35	80.5	102520	122330	176
	40	78.8	84880	101060	175
	50	75.4	61490	71410	173
	60	71.9	47260	54360	170
	70	68.3	37250	42980	166
	80	64.6	30120	34930	162
	90	60.8	25070	29210	156
	100	56.9	20940	24570	150
	110	52.7	17640	20870	143
	120	48.3	14930	17840	135
	130	43.6	12680	15330	125
140	38.4	10770	13200	113	
150	32.5	9140	11380	99	
160	25.4	7710	9800	80	
170	15.4	6470	8420	52	
180 feet	29	83.0	111870	111870	187
	30	82.7	111870	111870	187
	35	81.1	101470	111870	186
	40	79.5	84120	100830	185
	50	76.2	60940	71120	183
	60	72.9	46960	54070	180
	70	69.6	36910	42660	177
	80	66.1	29770	34590	173
	90	62.6	24740	28880	168
	100	58.9	20590	24230	162
	110	55.1	17290	20530	156
	120	51.1	14580	17500	148
	130	46.9	12330	14990	139
140	42.3	10420	12850	129	
150	37.3	8790	11040	117	
160	31.6	7360	9450	102	
170	24.7	6120	8070	83	
180	14.9	5020	6850	54	
190 feet	31	82.8	102910	102910	197
	35	81.5	100640	102910	196
	40	80.0	83350	100610	195

(continued)



# 77L TAPERED TIP BOOM RATINGS (Cont.)

With 68,000 Lb "A-B" Counterweight Extended

Boom Length	Radius In Feet	Boom Angle Degrees	Outriggers Set		Fl. From Boom Point
			Over Side	Over Rear	
220 feet cont.	140	52.0	12300	14740	180
	150	48.6	10680	12940	172
	160	45.0	9290	11380	163
	170	41.2	8070	10030	152
	180	37.1	6990	8830	140
	190	32.5	6040	7770	125
	200	27.3	5200	6830	108
	210	20.9	4440	5980	86
	220	11.6	3770	5240	51
	230 feet	41	80.9	59230	59230
50		78.6	57520	57520	233
60		76.0	47570	55380	230
70		73.5	38200	44040	228
80		70.8	31200	36030	224
90		68.2	26310	30460	221
100		65.5	22190	25840	216
110		62.7	18920	22160	211
120		59.9	16240	19170	206
130		56.9	14010	16670	200
140		53.9	12140	14580	193
150		50.8	10520	12780	185
160		47.5	9130	11230	177
170		44.0	7910	9860	167
180		40.3	6840	8680	156
190		36.2	5890	7620	143
200		31.8	5040	6680	128
210		26.7	4280	5830	110
220	20.5	3600	5070	87	
230	11.4	3000	4400	52	
240 feet	43	80.8	54900	54900	244
	50	79.1	54280	54280	243
	60	76.6	47150	52900	241
	70	74.2	37710	43710	238
	80	71.7	30850	35680	235
	90	69.1	25970	30130	231
	100	66.6	21850	25500	227
	110	63.9	18570	21820	223
	120	61.2	15890	18820	217
	130	58.5	13660	16320	212
	140	55.6	11770	14210	205
	150	52.7	10160	12420	198
	160	49.6	8760	10860	190
	170	46.4	7550	9510	181
	180	43.0	6470	8310	171
	190	39.4	5520	7250	159
	200	35.5	4660	6300	146
	210	31.1	3900	5450	131
220	26.1	3210	4690	113	
230	20.0	2600	4010	89	
240	11.1	2050	3390	53	
250 feet	44	80.9	51590	51590	254
	50	79.5	51140	51140	253
	60	77.2	46640	49660	251
	70	74.8	37210	43380	248

Boom Length	Radius In Feet	Boom Angle Degrees	Outriggers Set		Fl. From Boom Point
			Over Side	Over Rear	
250 feet cont.	80	72.4	30430	35340	245
	90	70.0	25630	29800	242
	100	67.5	21500	25160	238
	110	65.0	18220	21470	234
	120	62.5	15530	18470	229
	130	59.9	13300	15970	223
	140	57.2	11410	13860	217
	150	54.4	9790	12060	210
	160	51.5	8400	10510	203
	170	48.5	7180	9140	194
260 feet	46	80.8	48610	48610	264
	50	79.9	48210	48210	263
	60	77.7	46670	47060	261
	70	75.4	37340	43600	259
	80	73.1	30560	35540	256
	90	70.8	25840	30010	253
	100	68.5	21700	25370	249
	110	66.1	18410	21680	245
	120	63.6	15730	18670	240
	130	61.1	13490	16170	235
270 feet	47	80.9	45740	45740	274
	50	80.3	45380	45380	273
	60	78.1	44080	44080	271
	70	76.0	36850	42520	269
	80	73.8	30080	35190	266
	90	71.5	25430	29660	263
	100	69.3	21340	25010	260
	110	67.0	18050	21320	256
	120	64.7	15360	18300	251
	130	62.3	13120	15800	246
280 feet	48	80.9	41610	41610	284
	50	80.0	41210	41210	283
	60	77.7	39670	40060	281
	70	75.4	30340	36600	279
	80	73.1	25560	31540	276

Boom Length	Radius In Feet	Boom Angle Degrees	Outriggers Set		Fl. From Boom Point
			Over Side	Over Rear	
270 feet cont.	170	52.2	6980	8950	220
	180	49.5	5900	7750	212
	190	46.6	4950	6680	203
	200	43.6	4090	5730	193
	210	40.4	3320	4880	182
	220	37.0	2630	4110	170
	230	33.4	2000	3420	156
	240	29.3	1420	2780	139
	250	24.6	—	2200	119
	260	18.9	—	1680	94
280 feet	49	80.9	36550	36550	283
	50	80.6	36330	36330	283
	60	78.6	35180	35180	281
	70	76.5	33800	33800	279
	80	74.4	29780	32410	277
	90	72.2	25160	29440	274
	100	70.1	21130	24790	270
	110	67.9	17830	21100	266
	120	65.6	15150	18090	262
	130	63.4	12910	15590	257
	140	61.1	11020	13470	252
	150	58.7	9400	11670	246
	160	56.3	8000	10100	240
	170	53.8	6770	8740	233
	180	51.2	5700	7540	225
	190	48.5	4730	6470	217
	200	45.7	3880	5520	208
	210	42.8	3110	4670	197
220	39.7	2400	3900	186	
230	36.4	1760	3200	173	
240	32.7	1190	2570	159	
250	28.7	—	1990	142	
260	24.1	—	1470	122	

8460.02

## LOAD HOISTING DATA

Max. Lifting Capacity in Pounds	Min. Parts of Load Line	Max. Hoisting Distance	
		Main (R.H.) Drum	Aux. (L.H.) Drum
330,000	12	70 ft.	49 ft.
324,940	11	76 ft.	52 ft.
295,420	10	84 ft.	53 ft.
265,880	9	93 ft.	65 ft.
236,340	8	105 ft.	73 ft.
206,790	7	120 ft.	84 ft.
177,250	6	140 ft.	98 ft.
147,710	5	168 ft.	118 ft.
118,170	4	210 ft.	147 ft.
88,620	3	280 ft.	196 ft.
59,080	2	420 ft.	295 ft.
29,540	1	840 ft.	590 ft.

Based on 1" EIPS Rope

# 77L TAPERED TIP BOOM RATINGS

With 68,000 Lb "A-B" Cwt. Retracted

Boom Length	Radius In Feet	Boom Angle Degrees	OUTRIGGERS FREE		Fl. From Boom Point
			Over Side	Over Rear	
80 feet	70	35.0	12440	24530	53
	80	19.3	10120	20460	34
90 feet	60	51.9	15000	29780	78
	70	43.3	11990	24230	69
	80	33.0	9680	20160	56
100 feet	60	56.3	14560	29500	90
	70	49.1	11560	23950	83
	80	41.0	9260	19870	73
110 feet	90	31.2	7540	16860	59
	100	17.3	6060	14400	37

Boom Length	Radius In Feet	Boom Angle Degrees	OUTRIGGERS FREE		Fl. From Boom Point
			Over Side	Over Rear	
110 feet	50	65.6	17920	36990	107
	60	59.7	14010	29130	102
	70	53.5	11020	23580	96
	80	46.7	8740	19510	87
	90	39.0	7070	16530	76
	100	29.8	5590	14060	62
120 feet	110	16.4	4360	12050	38

Boom Length	Radius In Feet	Boom Angle Degrees	OUTRIGGERS FREE		Fl. From Boom Point
			Over Side	Over Rear	
120 feet	50	67.7	17370	36620	118
	60	62.5	13490	28780	114
	70	56.9	10510	23220	108
	80	51.0	8250	19150	101
	90	44.6	6600	16190	91
	100	37.3	5150	13740	80
110 feet	110	28.5	3930	11730	64
	120	15.7	2900	10080	40

8460.04

# 77L TAPERED TIP BOOM RATINGS (Cont.)

With 68,000 Lb "A-B" Counterweight Extended

Boom Length	Radius In Feet	Boom Angle Degrees	Outriggers Set		Ft. From Boom Point	
			Over Side	Over Rear		
220 feet cont.	140	52.0	12300	14740	180	
	150	48.6	10680	12940	172	
	160	45.0	9290	11380	163	
	170	41.2	8070	10030	152	
	180	37.1	6990	8830	140	
	190	32.5	6040	7770	125	
	200	27.3	5200	6830	108	
	210	20.9	4440	5980	86	
	220	11.6	3770	5240	51	
	230 feet	41	80.9	59230	59230	234
50		78.6	57520	57520	233	
60		76.0	47570	55380	230	
70		73.5	38200	44040	228	
80		70.8	31200	36030	224	
90		68.2	26310	30460	221	
100		65.5	22190	25840	216	
110		62.7	18920	22160	211	
120		59.9	16240	19170	206	
130		56.9	14010	16670	200	
140		53.9	12140	14580	193	
150		50.8	10520	12780	185	
160		47.5	9130	11230	177	
170		44.0	7910	9860	167	
180		40.3	6840	8680	156	
190		36.2	5890	7620	143	
200		31.8	5040	6680	128	
210		26.7	4280	5830	110	
220		20.5	3600	5070	87	
230		11.4	3000	4400	52	
240 feet		43	80.8	54900	54900	244
		50	79.1	54280	54280	243
		60	76.6	47150	52900	241
	70	74.2	37710	43710	238	
	80	71.7	30850	35680	235	
	90	69.1	25970	30130	231	
	100	66.6	21850	25500	227	
	110	63.9	18570	21820	223	
	120	61.2	15890	18820	217	
	130	58.5	13660	16320	212	
	140	55.6	11770	14210	205	
	150	52.7	10160	12420	198	
	160	49.6	8760	10860	190	
	170	46.4	7550	9510	181	
	180	43.0	6470	8310	171	
	190	39.4	5520	7250	159	
	200	35.5	4660	6300	146	
	210	31.1	3900	5450	131	
	220	26.1	3210	4690	113	
	230	20.0	2600	4010	89	
	240	11.1	2050	3390	53	
	250 feet	44	80.9	51590	51590	254
		50	79.5	51140	51140	253
60		77.2	46640	49660	251	
70		74.8	37210	43380	248	

Boom Length	Radius In Feet	Boom Angle Degrees	Outriggers Set		Ft. From Boom Point
			Over Side	Over Rear	
250 feet cont.	80	72.4	30430	35340	245
	90	70.0	25630	29800	242
	100	67.5	21500	25160	238
	110	65.0	18220	21470	234
	120	62.5	15530	18470	229
	130	59.9	13300	15970	223
	140	57.2	11410	13860	217
	150	54.4	9790	12060	210
	160	51.5	8400	10510	203
	170	48.5	7180	9140	194
260 feet	46	80.8	48610	48610	264
	50	79.9	48210	48210	263
	60	77.7	46670	47060	261
	70	75.4	37340	43600	259
	80	73.1	30560	35540	256
	90	70.8	25840	30010	253
	100	68.5	21700	25370	249
	110	66.1	18410	21680	245
	120	63.6	15730	18670	240
	130	61.1	13490	16170	235
270 feet	47	80.9	45740	45740	274
	50	80.3	45380	45380	273
	60	78.1	44080	44080	271
	70	76.0	36850	42520	269
	80	73.8	30080	35190	266
	90	71.5	25430	29660	263
	100	69.3	21340	25010	260
	110	67.0	18050	21320	256
	120	64.7	15360	18300	251
	130	62.3	13120	15800	246
280 feet	48	80.9	42870	42870	284
	50	80.3	42510	42510	283
	60	78.1	41210	41210	281
	70	76.0	34080	40650	279
	80	73.8	27310	35120	276
	90	71.5	22660	29590	273
	100	69.3	18570	25060	269
	110	67.0	15280	21430	264
	120	64.7	12590	18300	259
	130	62.3	10350	15800	254

Boom Length	Radius In Feet	Boom Angle Degrees	Outriggers Set		Ft. From Boom Point
			Over Side	Over Rear	
270 feet cont.	170	52.2	6980	8950	220
	180	49.5	5900	7750	212
	190	46.6	4950	6680	203
	200	43.6	4090	5730	193
	210	40.4	3320	4880	182
	220	37.0	2630	4110	170
	230	33.4	2000	3420	156
	240	29.3	1420	2780	139
	250	24.6	—	2200	119
	260	18.9	—	1680	94
280 feet	49	80.9	36550	36550	283
	50	80.6	36330	36330	283
	60	78.6	35180	35180	281
	70	76.5	33800	33800	279
	80	74.4	29780	32410	277
	90	72.2	25160	29440	274
	100	70.1	21130	24790	270
	110	67.9	17830	21100	266
	120	65.6	15150	18090	262
	130	63.4	12910	15590	257

8460.02

## LOAD HOISTING DATA

Max. Lifting Capacity in Pounds	Min. Parts of Load Line	Max. Hoisting Distance	
		Main (R.H.) Drum	Aux. (L.H.) Drum
330,000	12	70 ft.	49 ft.
324,940	11	76 ft.	52 ft.
295,420	10	84 ft.	53 ft.
265,880	9	93 ft.	65 ft.
236,340	8	105 ft.	73 ft.
206,790	7	120 ft.	84 ft.
177,250	6	140 ft.	98 ft.
147,710	5	168 ft.	118 ft.
118,170	4	210 ft.	147 ft.
88,620	3	280 ft.	196 ft.
59,080	2	420 ft.	295 ft.
29,540	1	840 ft.	590 ft.

Based on 1" EIPS Rope

# 77L TAPERED TIP BOOM RATINGS

With 68,000 Lb "A-B" Cwt. Retracted

Boom Length	Radius In Feet	Boom Angle Degrees	OUTRIGGERS FREE		Ft. From Boom Point
			Over Side	Over Rear	
80 feet	70	35.0	12440	24530	53
	80	19.3	10120	20460	34
90 feet	60	51.9	15000	29780	78
	70	43.3	11990	24230	69
	80	33.0	9680	20160	56
100 feet	60	56.3	14560	29500	90
	70	49.1	11560	23950	83
	80	41.0	9260	19870	73
110 feet	90	31.2	7540	16860	59
	100	17.3	6060	14400	37

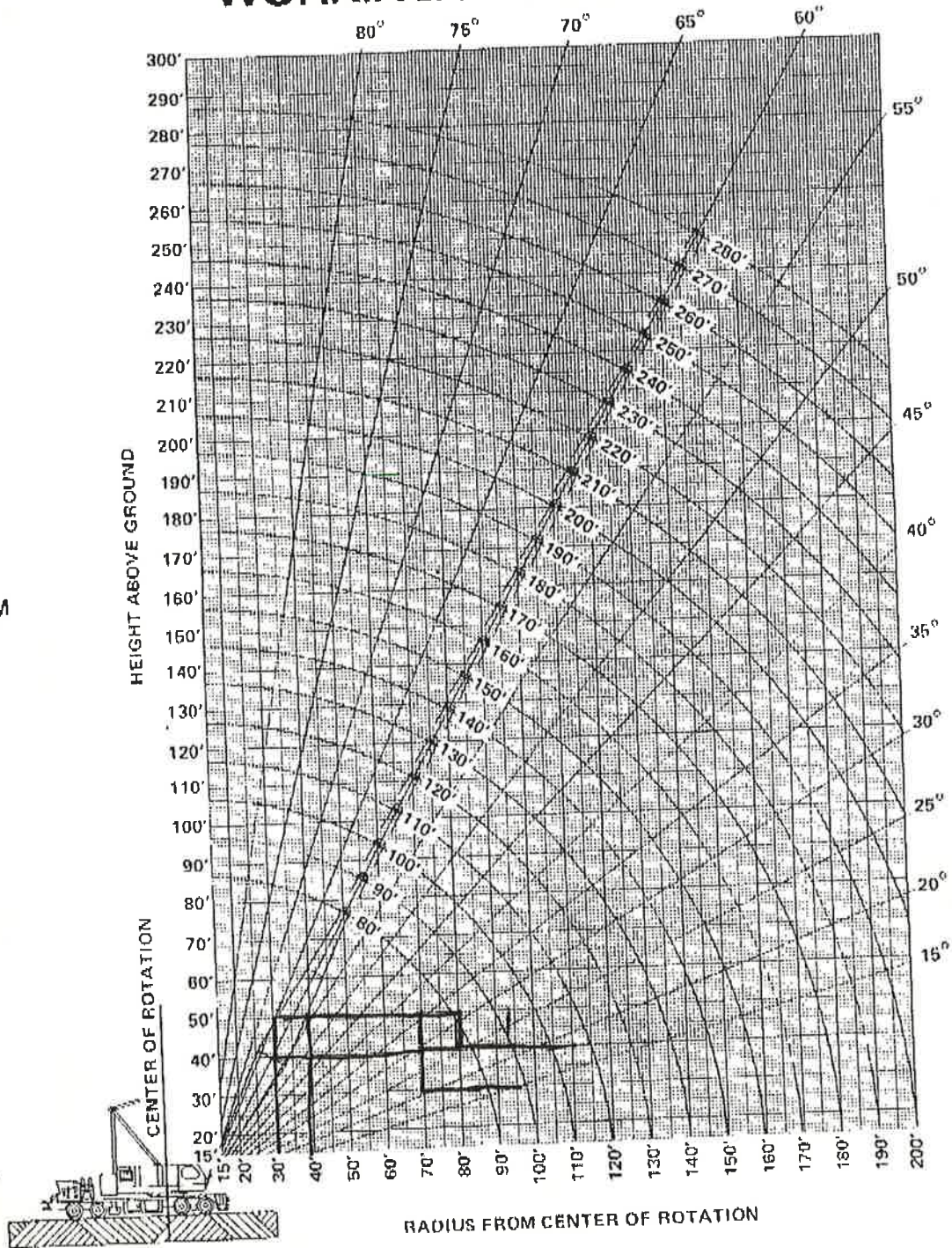
Boom Length	Radius In Feet	Boom Angle Degrees	OUTRIGGERS FREE		Ft. From Boom Point
			Over Side	Over Rear	
110 feet	50	65.6	17920	36990	107
	60	59.7	14010	29130	102
	70	53.5	11020	23580	96
	80	46.7	8740	19510	87
	90	39.0	7070	16530	76
	100	29.8	5590	14060	62
	110	16.4	4360	12050	38

Boom Length	Radius In Feet	Boom Angle Degrees	OUTRIGGERS FREE		Ft. From Boom Point
			Over Side	Over Rear	
120 feet	50	67.7	17370	36620	118
	60	62.5	13490	28780	114
	70	56.9	10510	23220	108
	80	51.0	8250	19150	101
	90	44.6	6600	16190	91
	100	37.3	5150	13740	80
	110	28.5	3930	11730	64
120	15.7	2900	10080	40	



# AMERICAN MODEL 8460 TRUCK CRANE WORKING RANGES

BOOM  
ANGLE  
DIAGRAM



FORM NO. 8460-TR-1

PRINTED IN U.S.A.

5JR7811

**SOLD & SERVICED BY:**



**CONSTRUCTION EQUIPMENT GROUP**  
63 SO. ROBERT ST., ST. PAUL, MN 55107



AMERICAN HOIST & DERRICK COMPANY

# CRANE RATING DATA

Load ratings are in pounds and do not exceed 85% of the load which would cause tipping with crane standing level on firm uniformly supporting surface. Safe loads depend on ground conditions, boom length, radius of operation, condition and inflation (130 PSI) of tires and proper handling, all of which must be taken into consideration by user. Ratings in shaded areas are based on structural limitations rather than stability. Approved working areas "Free Over Side" and "Free Over Rear" are shown under Diagram No. 1. Approved working areas "Outriggers Extended and Set Over Side or Rear" are shown under Diagram No. 2. Lifting is approved only in those areas for which ratings are shown in the rating chart.

"Radius in feet" is the horizontal distance at crane base level from center pin to a vertical line through the center of gravity of the suspended load. Blocks, slings, buckets, and other load carrying devices are considered part of the load. The weight of standard hoisting ropes has been calculated as part of the boom point dead load and need not be considered in determining net allowable loads. Retractable A-frame must be in fully raised position for all ratings.

Main load line is 1 inch diameter with a minimum breaking strength of 103,400 pounds. Boom suspension line 3/4 inch diameter with minimum breaking strength of 58,800 lb. Boom suspension pendants 1-1/4 inch diameter with minimum breaking strength of 175,800 lb.

Compliance to B30.5 based on American Carrier Mounting.

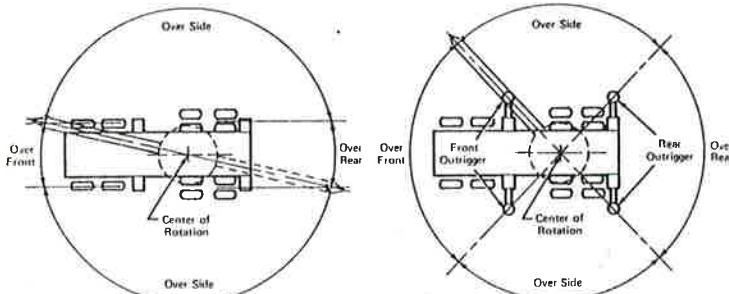


DIAGRAM NO. 1  
FREE RATINGS

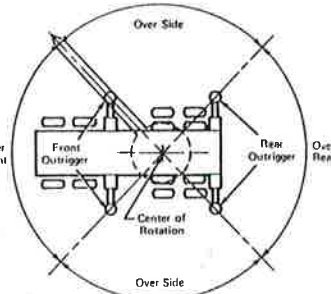


DIAGRAM NO. 2  
OUTRIGGERS EXTENDED AND SET

## BOOM AND JIB ERECTION†

With Front Bumper Counterweight 18,000 Pounds

BOOM LENGTH	NO. 16HL JIB	NO. 9HL JIB
280' 77L Tapered Tip	—	—
270' 77L Tapered Tip	80'	80'
260' 77L Tapered Tip	100'	80'
240' 77L Hammerhead	—	—
230' 77L Hammerhead	70'	80'
220' 77L Hammerhead	80'	80'

Without Front Bumper Counterweight

BOOM LENGTH	NO. 16HL JIB	NO. 9HL JIB
280' 77L Tapered Tip	—	—
260' 77L Tapered Tip	—	40'
250' 77L Tapered Tip	50'	60'
240' 77L Tapered Tip	80'	80'
230' 77L Hammerhead	—	—
210' 77L Hammerhead	60'	70'
200' 77L Hammerhead	80'	80'

Front bumper counterweight to be used for erection only. †Self-erection over the rear with "A-B" (68,500 lb) counterweight extended and outriggers extended and set.

# PERFORMANCE

SWING SPEED ..... 3.5 RPM Maximum

## SINGLE LINE SPEED:

Main and Auxiliary Hoist Drums

Low speed — bottom layer ..... 81 FPM  
 Low speed — top layer ..... 118 FPM  
 High speed — bottom layer ..... 160 FPM  
 High speed — top layer ..... 233 FPM

Auxiliary Third Drum

Low speed — bottom layer ..... 97 FPM  
 Low speed — top layer ..... 119 FPM  
 High speed — bottom layer ..... 195 FPM  
 High speed — top layer ..... 236 FPM

## SINGLE LINE PULL:

Main and Auxiliary Hoist Drums

Low speed — bottom layer ..... 45,000 lbs. SLP  
 Low speed — top layer ..... 30,000 lbs. SLP  
 High speed — bottom layer ..... 22,500 lbs. SLP  
 High speed — top layer ..... 15,000 lbs. SLP

Auxiliary Third Drum

Low speed — bottom layer ..... 37,300 lbs. SLP  
 Low speed — top layer ..... 29,600 lbs. SLP  
 High speed — bottom layer ..... 18,650 lbs. SLP  
 High speed — top layer ..... 14,800 lbs. SLP

## BOOM SPEED:

Time to raise 50 ft. boom from ground to minimum radius ..... 1.9 minutes  
 Time to lower 50 ft. boom from minimum radius to ground ..... 1.67 minutes

## BOOM COMPOSITION

### 77L Tubular Hammerhead Boom

Boom Length In Feet	30 Ft 77L Inner	10 Ft 77S Center	20 Ft 77S Center	50 Ft 77L Center	20 Ft 77L Outer Base	Hammerhead
50	1	—	—	—	1	1
60	1	1	—	—	1	1
70	1	—	1	—	1	1
80	1	1	1	—	1	1
90	1	—	2	—	1	1
100	1	—	—	1	1	1
110	1	1	—	1	1	1
120	1	—	1	1	1	1
130	1	1	1	1	1	1
140	1	—	2	1	1	1
150	1	—	—	2	1	1
160	1	1	—	2	1	1
170	1	—	1	2	1	1
180	1	1	1	2	1	1
190	1	—	2	2	1	1
200	1	—	—	3	1	1
210	1	1	—	3	1	1
220	1	—	1	3	1	1
230	1	1	1	3	1	1
240	1	—	2	3	1	1

### 77L Tubular Tapered Tip Boom

Boom Length In Feet	30 Ft 77L Inner	10 Ft 77S Center	20 Ft 77S Center	50 Ft 77L Center	20 Ft 77L Outer Base	30 Ft 77L Tapered Tip
80	1	—	—	—	1	1
90	1	1	—	—	1	1
100	1	—	1	—	1	1
110	1	1	1	—	1	1
120	1	—	2	—	1	1
130	1	—	—	1	1	1
140	1	1	—	1	1	1
150	1	—	1	1	1	1
160	1	1	1	1	1	1
170	1	—	2	1	1	1
180	1	—	—	2	1	1
190	1	1	—	2	1	1
200	1	—	1	2	1	1
210	1	1	1	2	1	1
220	1	—	2	2	1	1
230	1	—	—	3	1	1
240	1	1	—	3	1	1
250	1	—	1	3	1	1
260	1	1	1	3	1	1
270	1	—	2	3	1	1
280	1	—	—	4	1	1

NOTE: In accordance with varying material situations, and the Company's policy of constant product improvement, these specifications subject to change without notice and without incurring responsibility to units previously sold.