



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
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	167
	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 HAMMERHEAD 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	
190 feet (cont.)	50	76.9	60400	70840	193
	60	73.8	46450	53770	190
	70	70.7	36580	42330	187
	80	67.4	29430	34250	183
	90	64.1	24410	28550	179
	100	60.7	20260	23900	174
	110	57.2	16940	20180	168
	120	53.5	14240	17160	161
	130	49.7	11980	14640	153
	140	45.5	10080	12510	143
	150	41.1	8440	10690	133
	160	36.2	7020	9110	120
	170	30.7	5780	7730	105
	180	24.0	4680	6520	85
	190	14.5	3700	5430	55
	200 feet	32	82.8	78400	78400
35		82.0	78400	78400	206
40		80.5	78400	78400	205
50		77.6	59980	70670	203
60		74.7	46120	53620	201
70		71.7	36440	42190	198
80		68.6	29290	34110	194
90		65.5	24290	28440	190
100		62.3	20140	23780	185
110		59.0	16830	20070	179
120		55.6	14120	17040	173
130		52.1	11880	14530	166
140		48.3	9960	12400	157
150		44.3	8330	10580	147
160		40.0	6920	9010	136
170		35.6	5680	7640	123
180	29.9	4580	6410	107	
190	23.3	3610	5330	87	
200	14.1	2740	4370	56	
210 feet	33	82.9	73670	73670	216
	35	82.3	73670	73670	216
	40	81.0	73670	73670	215

Boom Length	Radius In Feet	Boom Angle Degrees	Outriggers Set		Ft. From Boom Point
			Over Side	Over Rear	
210 feet cont.	50	78.2	59460	70400	214
	60	75.4	45640	53330	211
	70	72.6	36050	41880	208
	80	69.7	28960	33790	205
	90	66.8	23970	28120	201
	100	63.7	19810	23460	196
	110	60.7	16500	19740	191
	120	57.5	13790	16710	185
	130	54.2	11530	14190	178
	140	50.7	9620	12060	170
	150	47.1	7980	10230	162
	160	43.2	6570	8660	151
	170	39.0	5330	7280	140
	180	34.4	4240	6070	126
	190	29.1	3260	4990	110
	200	22.8	2400	4030	89
210	13.8	1620	3160	57	
220 feet	34	83.0	68970	68970	226
	35	82.7	68970	68970	226
	40	81.4	68920	68920	226
	50	78.7	58820	67960	224
	60	76.1	45160	53040	222
	70	73.4	35580	41570	219
	80	70.7	29010	33840	216
	90	67.9	23650	27810	212
	100	65.0	19490	23140	207
	110	62.1	16170	19410	202
	120	59.1	13450	16380	197
	130	56.0	11190	13850	190
	140	52.8	9270	11720	183
	150	49.5	7640	9900	175
	160	45.9	6230	8320	166
	170	42.1	4990	6950	155
180	38.1	3890	5730	143	
190	33.6	2910	4640	129	
200	28.4	2050	3690	112	
210	22.2	1270	2820	91	
220	13.5	—	2040	59	

Boom Length	Radius In Feet	Boom Angle Degrees	Outriggers Set		Ft. From Boom Point
			Over Side	Over Rear	
230 feet	36	82.8	64560	64560	236
	40	81.8	64330	64330	236
	50	79.2	58270	63180	234
	60	76.7	44660	52740	232
	70	74.1	35110	41250	229
	80	71.5	28620	33520	226
	90	68.9	23310	27470	223
	100	66.2	19140	22790	218
	110	63.4	15810	19070	214
	120	60.6	13090	16030	208
	130	57.7	10830	13500	202
	140	54.7	8910	11360	196
	150	51.6	7280	9540	188
	160	48.3	5850	7950	180
	170	44.8	4610	6570	170
	180	41.2	3520	5360	159
190	37.2	2530	4270	147	
200	32.8	1650	3310	132	
210	27.8	—	2440	115	
220	21.7	—	1660	93	
240 feet	37	82.8	60050	60050	246
	40	82.1	60030	60030	246
	50	79.7	58170	59330	244
	60	77.3	44180	52450	242
	70	74.8	34700	40920	240
	80	72.3	28190	33210	237
	90	69.8	22920	27140	233
	100	67.2	18790	22460	229
	110	64.6	15460	18720	225
	120	61.9	12740	15680	220
	130	59.2	10470	13140	214
	140	56.4	8550	11000	208
	150	53.4	6910	9170	201
	160	50.4	5490	7600	193
	170	47.2	4220	6210	184
	180	43.8	3110	4990	174
190	40.3	2120	3910	163	
200	36.4	1240	2950	150	
210	32.1	—	2070	135	
220	27.2	—	1290	117	

8460.01

77L HAMMERHEAD 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	
50 feet	50	29.7	16380	35130	32
60 feet	40	56.7	22400	46460	58
	50	44.1	16170	35120	50
	60	26.9	11890	26980	35
70 feet	40	62.0	22070	45960	70
	50	52.1	15890	35020	63
	60	40.6	11690	26940	53
70	24.7	8520	21260	37	
80 feet	35	69.6	25690	50670	83
	40	65.7	21580	45300	81
	50	57.6	15440	34770	76
	60	48.5	11300	26720	68
	80	23.0	8170	21060	57
			16890	39	

Boom Length	Radius In Feet	Boom Angle Degrees	Outriggers Free		Ft. From Boom Point
			Over Side	Over Rear	
90 feet	35	71.9	25190	50010	94
	40	68.6	21110	44680	92
	50	61.5	14990	34510	87
	60	54.0	10900	26480	81
	70	45.5	7800	20830	72
	80	35.5	5410	16680	60
90	21.6	3560	13540	41	
100 feet	35	73.8	25440	50230	104
	40	70.8	21380	44930	103
	50	64.6	15260	34740	98
	60	58.0	11210	26750	93
	70	51.0	8130	21110	86
	80	43.0	5750	16970	76
90	33.6	3970	13900	63	
100	20.4	2390	11340	42	

Boom Length	Radius In Feet	Boom Angle Degrees	Outriggers Free		Ft. From Boom Point
			Over Side	Over Rear	
110 feet	35	75.3	24840	49460	115
	40	72.6	20820	44200	113
	50	67.1	14730	34410	109
	60	61.3	10720	26430	105
	70	55.1	7640	20790	98
	80	48.4	5290	16650	90
90	40.9	3560	13620	80	
100	31.9	2010	11080	66	
110	19.4	710	9010	44	
120 feet	30	79.0	29510	55130	126
	35	76.5	24280	48750	125
	40	74.1	20290	43540	124
	50	69.1	14220	34080	120
	60	63.8	10230	26110	116
	70	58.4	7170	20470	110
80	52.5	4830	16330	103	
90	46.2	3140	13330	95	
100	39.0	1620	10810	83	

8460.03

NOTE: Counterweight may be hydraulically extended or retracted. The normal operating condition is with the counterweight extended. When working over the side on rubber the counterweight may be retracted to improve back stability and enable the operator to work at shorter radii.

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
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	99
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
	180	45.4	6100	7940	185
	190	42.1	5150	6880	175
	200	38.6	4300	5930	163
	210	34.7	3540	5090	149
	220	30.5	2850	4320	134
230	25.6	2220	3630	115	
240	19.6	1660	3000	91	
250	10.9	1160	2440	54	
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
	140	58.6	11600	14050	229
	150	56.0	9980	12250	223
	160	53.3	8580	10680	215
	170	50.5	7360	9330	208
	180	47.5	6290	8130	199
190	44.5	5320	7060	189	
200	41.2	4470	6110	178	
210	37.8	3710	5260	166	
220	34.0	3010	4490	153	
230	29.9	2390	3800	136	
240	25.1	1830	3170	117	
250	19.2	1310	2600	93	
260	10.7	—	2090	55	
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
	140	59.9	11230	13680	241
	150	57.4	9610	11880	234
	160	54.8	8200	10310	228

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
	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	75 ft.	55 ft.
324,940	11	82 ft.	60 ft.
295,420	10	90 ft.	66 ft.
265,880	9	100 ft.	73 ft.
236,340	8	112 ft.	83 ft.
206,790	7	129 ft.	95 ft.
177,250	6	150 ft.	110 ft.
147,710	5	180 ft.	133 ft.
118,170	4	225 ft.	166 ft.
88,620	3	301 ft.	221 ft.
59,080	2	451 ft.	332 ft.
29,540	1	903 ft.	665 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
	90	18.2	7920	17120	35
100 feet	60	56.3	14560	29500	90
	70	49.1	11560	23950	83
	80	41.0	9260	19870	73
	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	

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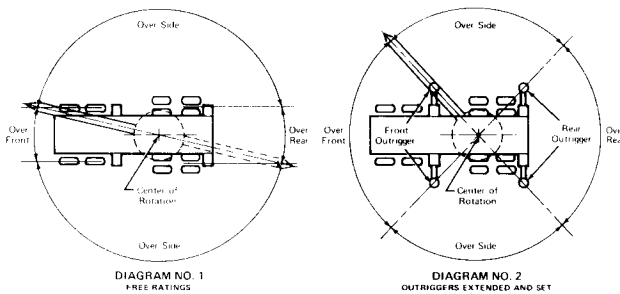
CRANE RATING DATA

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.



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	93 FPM
Low speed — top layer	142 FPM
High speed — bottom layer	189 FPM
High speed — top layer	282 FPM

Auxiliary Third Drum

Low speed — bottom layer	142 FPM
Low speed — top layer	192 FPM
High speed — bottom layer	272 FPM
High speed — top layer	368 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

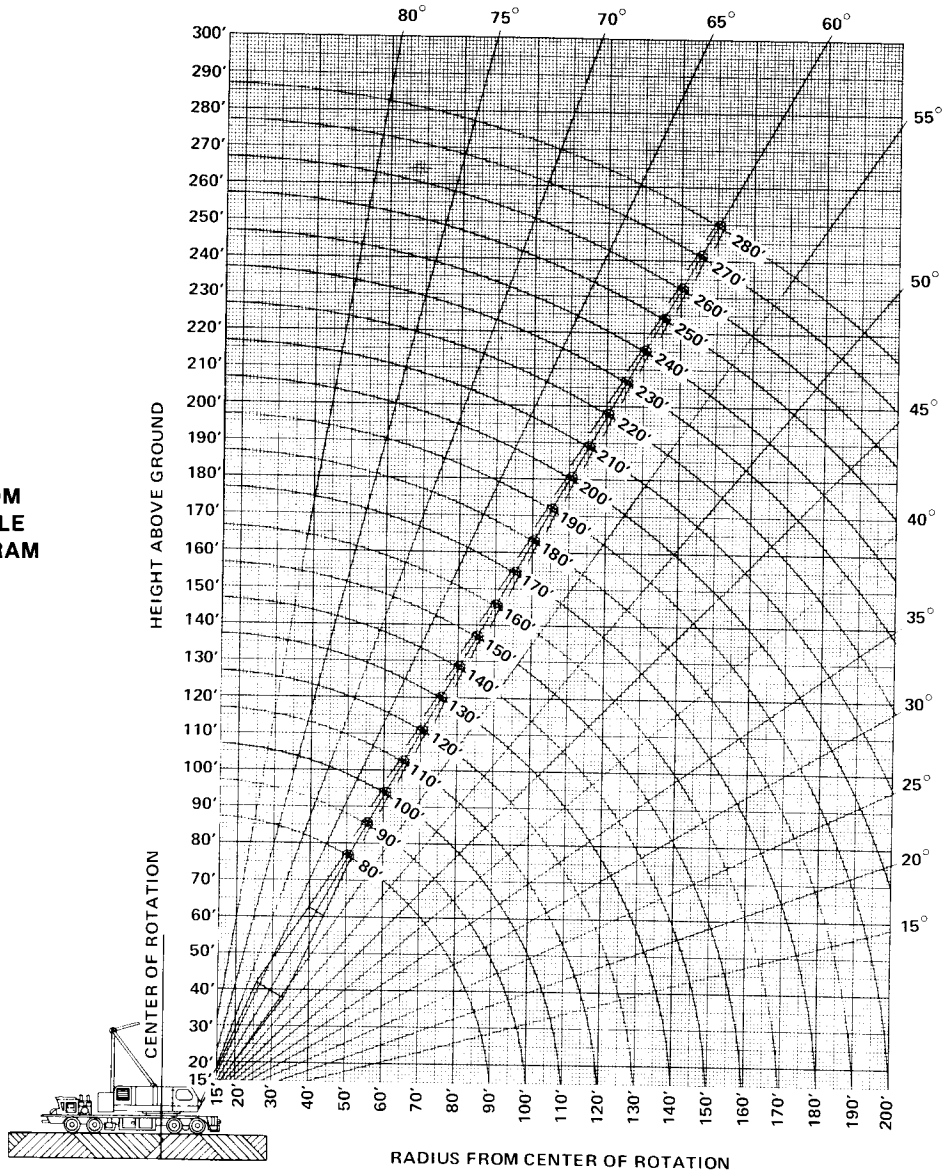
77L Tubular Tapered Tip Boom

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.

AMERICAN MODEL 8460 TRUCK CRANE WORKING RANGES

**BOOM
ANGLE
DIAGRAM**



5JR784

FORM NO. 8460-TR-1

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TRUCK CRANES

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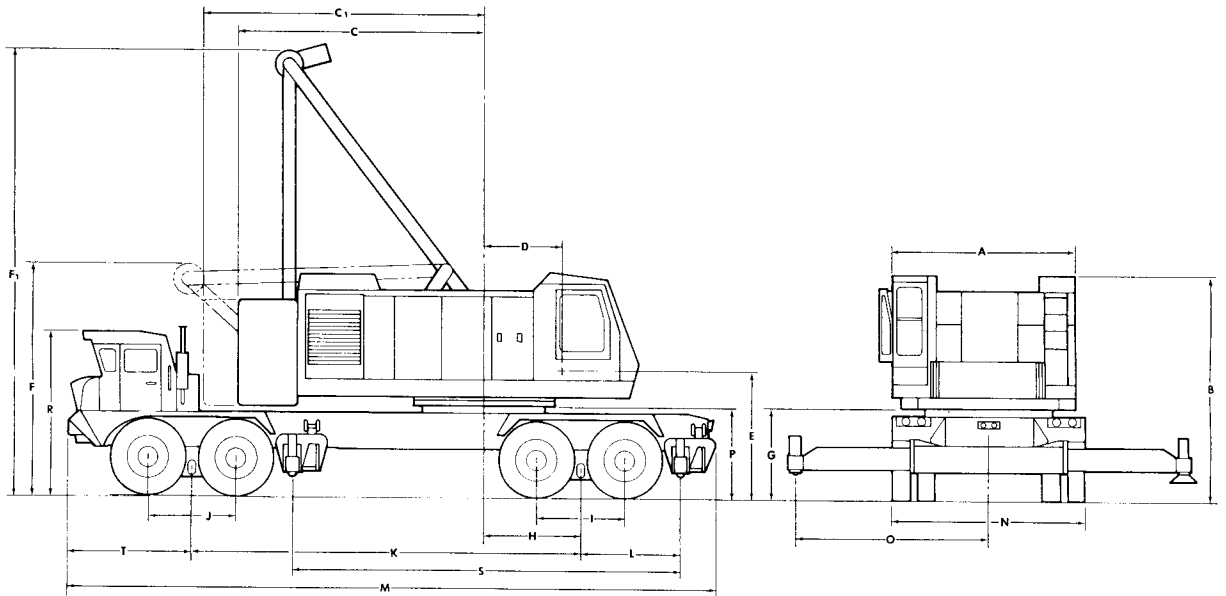
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8460 CARRIER SPECIFICATIONS

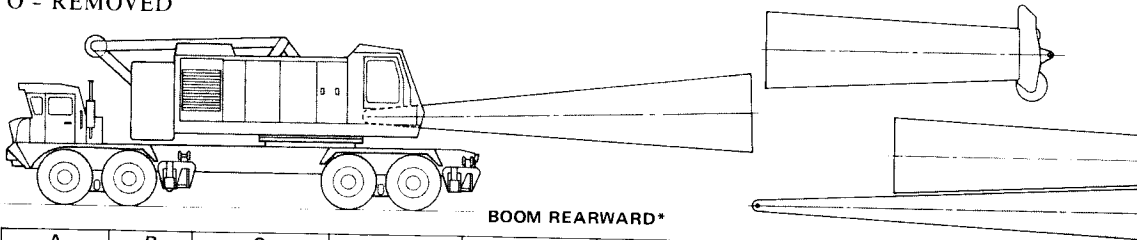


GENERAL DIMENSIONS

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 ₁ .	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 ₁ .	Height over A-Frame (raised)	25' 2"	S.	Centerline or 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 1/4"		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"

8460 TRAVELING WEIGHTS

X = IN PLACE
O = REMOVED



BOOM REARWARD*

A TAPER TIP FOLDED	B BLOCK	C OUTER BOOM HAMMERHEAD	D INNER BOOM	E COUNTER- WEIGHT	F FRONT OUTRIGGER	G REAR OUTRIGGER	FRONT TANDEM (LB)	REAR TANDEM (LB)	GROSS WEIGHT (LB)
O	X	X	X	X	X	X	77410	136080	213500
O	O	X	X	X	X	X	81870	129630	211490
X	O	O	X	X	X	X	91760	116190	207950
O	X	X	X	O	X	X	21960	123040	145000
O	O	X	X	O	X	X	26410	116580	142990
X	O	O	X	O	X	X	36310	103150	139460
O	X	X	X	O	O	X	14250	119940	134190
O	O	X	X	O	O	X	18710	113490	132200
X	O	O	X	O	O	X	28610	100050	128660
O	X	X	X	O	X	O	25050	109140	134190
O	O	X	X	O	X	O	29510	102690	132200
X	O	O	X	O	X	O	39410	89250	128660
O	X	X	X	O	O	O	17350	106040	123390
O	O	X	X	O	O	O	21810	99590	121400
X	O	O	X	O	O	O	31700	86150	117850
O	O	O	X	X	X	X	97680	106130	203810
O	O	O	X	O	X	X	42220	93090	135310
O	O	O	X	O	O	X	34520	89990	124510
O	O	O	X	O	X	O	45320	79190	124510
O	O	O	O	O	O	O	37620	76090	113710
O	O	O	O	X	X	X	105350	89260	194610
O	O	O	O	O	X	X	49890	76220	126110
O	O	O	O	O	O	X	42190	73120	115310
O	O	O	O	O	X	O	52990	62320	115310
O	O	O	O	O	O	O	45290	59220	104510

*NOTE: In all conditions the traveling weights for the front and rear tandem are more equally balanced with the boom foot facing the rear of the carrier. EXAMPLE: With boom foot facing forward and items A thru G removed; front tandem = 25,160; rear tandem = 79,350; gross weight 104,510.

NOTE: Due to back stability, full counterweight must not be swung over side of machine without outriggers extended and set.

ADDITIONAL WEIGHT REDUCTION

ITEM	TOTAL WEIGHT ADJUSTMENT (LB)	EFFECT PER ITEM		ITEMS REMOVED	FRONT TANDEM (LB)	REAR TANDEM (LB)	GROSS WEIGHT (LB)
		FRONT TANDEM (LB)	REAR TANDEM (LB)				
H—Counterweight Beams Rollers and Pins	2,380	-1560	- 820	A thru H	43,730	58,400	102,130
J—Laggings and Ropes, Main Hoist Drums	4,770	-1430	-3340	A thru J	42,300	55,060	97,360
K—Retractable A-Frame	4,700	-4070	- 630	A thru K	38,230	54,430	92,660
L—25% Full Upper Fuel Tank ... Was 50% Full	200	- 130	- 70	A thru L	38,100	54,360	92,460
M—Modular Operator's Cab	470	- 0	- 470	A thru M	38,100	53,890	91,990

Carrier with outriggers and swing bearing — less upper	27525	49555	77080
Carrier with swing bearing — less upper and outriggers	22920	32560	55480

NOTE: Because of variable manufacturing tolerances a variance of ±3% should be allowed on these weights.

SEE OPERATOR'S MANUAL FOR MAXIMUM MPH TRAVEL SPEED RESTRICTIONS AS LIMITED BY TIRE LOADS.

8460 CARRIER SPECIFICATIONS

Specifications for AMERICAN MODEL 8460, 165 ton, 264" wheelbase, 8 x 4 carrier.

FRAME: Box welded frame members designed and manufactured to provide adequate support for crane weight and capacities; high strength alloy steel used throughout the construction of the carrier; tow bars are provided front and rear.

HYDRAULIC OUTRIGGERS: Two independent housings fabricated from 100,000 PSI yield steel; outrigger beams with horizontal and vertical hydraulic movements; automatic check and manual shutoff valves in hydraulic jacks to assure maximum safety for all lifts; hardened chrome plated rams, fitted with 42" dia. spun high strength steel floats, pin connected and removable; maximum stroke of vertical jacks is 12 inches; maximum lift under floats is 7 inches; outrigger controls for RH outriggers on RH side of carrier and controls for LH outriggers on LH side.

ENGINE: Detroit Diesel (GM) 8V-71-N Model No. 7087-7040 diesel engine, 8 cylinder, 4-1/4" bore x 5" stroke, 568 cu. in. displacement, rated 318 HP at 2100 RPM.

OPTIONAL ENGINE: Cummins NTC-350 diesel engine, 6 cylinder, 5-1/2" bore x 6" stroke, 855 cu. in. displacement, rated 350 HP at 2100 RPM thermostatically controlled radiator shutters.

FUEL TANK: One 125 (U.S.) gallon safety fuel tank.

ELECTRICAL: 12 volt system; 500 watt alternator; 2 - 8D 12 volt batteries.

POWER STEERING: Garrison twin-ram hydraulic power steering with Ross cam, 20" dia. steering wheel.

CLUTCH: Spicer AS 1402, two plate, dry type, angle spring clutch hydraulically actuated.

MAIN TRANSMISSION: Fuller Model T955ALL modified to give 5 + 1 speeds forward and 1 + 1 reverse.

RATIOS:

Low	26.54:1	Fourth	1.16:1
First	6.35:1	Fifth	1.00:1
Second	3.75:1	Reverse	6.48:1
Third	2.04:1	Reverse Low	27.09:1

AUXILIARY TRANSMISSION: Spicer Model 1241C, Four Speed.

RATIOS: First 2.37:1
Second 1.24:1
Third 1.00:1
Fourth 0.81:1

FRONT AXLES: Shuler FTCA-34-L-30 in tandem. 48,000# highway capacity.

REAR AXLES: Clark planetary 91000 tandem assembly, non-spin differential on leading axle; ratio 9.00:1

SUSPENSION: Hendrickson solid mount with rubber bushed torque rods front and rear.

PROPEL SHAFT: Spicer 1710 Series and 1810 Series.

SERVICE BRAKES: Air on all wheels with 14.5 C.F.M. air compressor and two reservoirs; lining area 20" x 7" (1000 sq. in.) rear; 17-1/2" x 4" (495 sq. in.) front; 1495 sq. in. total lining area.

EMERGENCY BRAKES: Spring set, air release system on both rear axles with operator's control on dash panel; air reservoir for release of spring set chambers.

WHEELS: Cast spoke front; rear integrally cast with axles; 10.00 x 24 rims.

TIRES: Michelin 14:00 x 24 XRB — Three Star.

CAB: One man cab 32" wide; fully enclosed offset to left side; hinged and removable panel for engine access; air cushion driver's seat.

STANDARD EQUIPMENT: West Coast type mirrors, air windshield wiper, windshield washer, heater, defroster, sealed beam oval headlights, front and rear directional signals, combination stop and taillights, backup lights, clearance lights on cab top and side, electrical and air horns, seat belts, dome light, indirect lighted instrument panel, speedometer, ammeter, fuel gauge, engine temperature indicator, air pressure gauge, oil pressure gauge, low air pressure warning signal, and tachometer.

OPTIONAL ACCESSORIES:

- A. Remote control
- B. Ether cold weather starting kit
- C. Spare tire & rim
- D. Engine brake
- E. Full length fenders
- F. Side mounted storage box
- G. Float racks
- H. Heavy duty front axles

PERFORMANCE:

Maximum Governed Speed 45 MPH
Minimum Speed (1000 RPM) 0.26 MPH
Maximum Gradeability (Off Highway With CTWT) 25%

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.