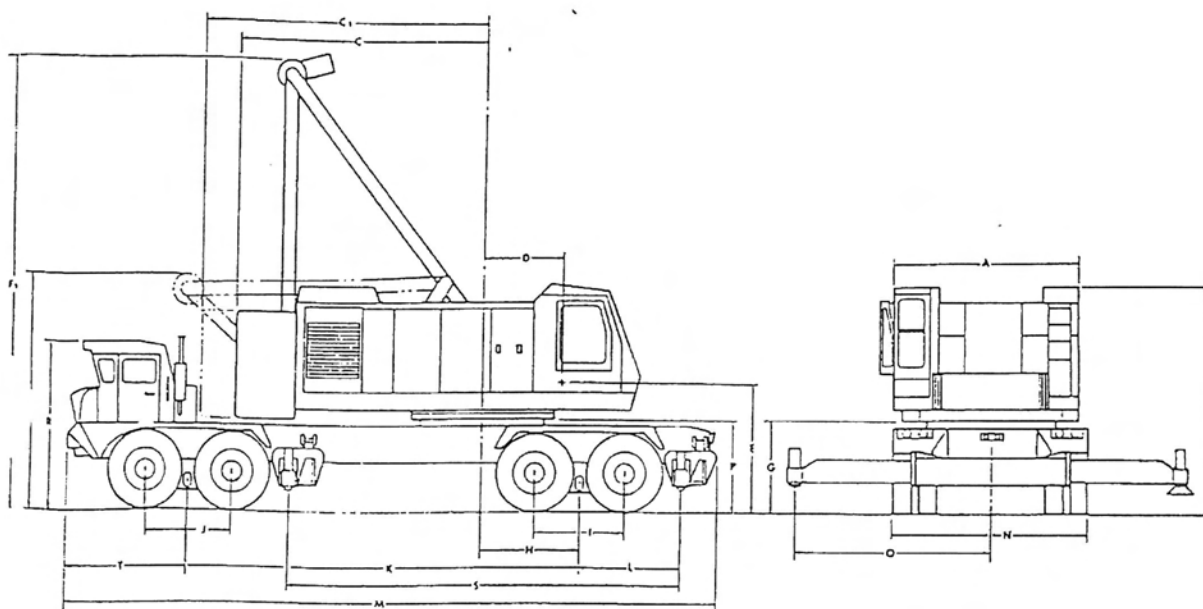




8460 CARRIER SPECIFICATION



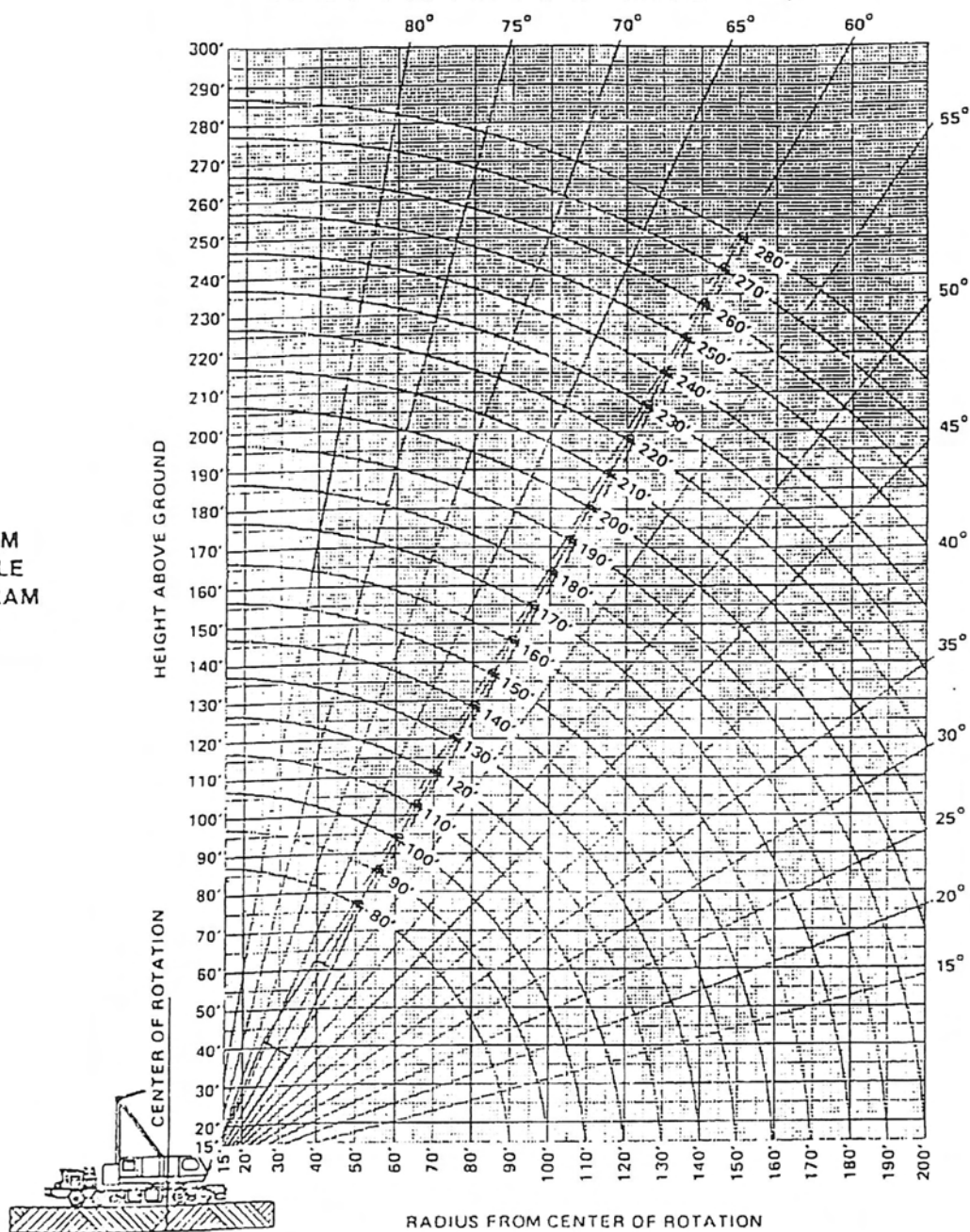
GENERAL DIMENSIONS

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 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 of rear outrigger to centerline of front outrigger	22' 0"
	Ground to bottom of counterweight	5' 3-1/2"	T.	Distance from Front Bogie to Front Bumper	7' 2-1/2"
	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"



AMERICAN MODEL 8460 TRUCK CRANE WORKING RANGES

BOOM
ANGLE
DIAGRAM



FORM NO. 8460-TR-1

PRINTED IN U.S.A.



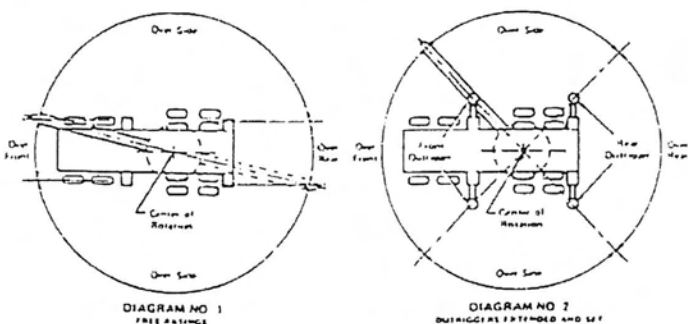
CRANE RATING DATA

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-8" (68,500 lb) counterweight extended and outriggers extended and set.

PERFORMANCE

SWING SPEED 3.5 RPM Max

SINGLE LINE SPEED:

Main and Auxiliary Hoist Drums

Low speed — bottom layer 81
Low speed — top layer 118
High speed — bottom layer 160
High speed — top layer 230

Auxiliary Third Drum

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

SINGLE LINE PULL:

Main and Auxiliary Hoist Drums

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

Auxiliary Third Drum

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

BOOM SPEED:

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

BOOM COMPOSITION

77L Tubular Hammerhead Boom

Boom Length in Feet	30 Ft 77L Hammer	10 Ft 77L Center	20 Ft 77L Center	50 Ft 77L Center	20 Ft 77L Outer Spine	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

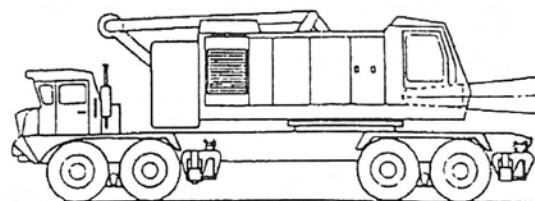
Boom Length in Feet	30 Ft 77L Taper	10 Ft 77L Center	20 Ft 77L Center	50 Ft 77L Center	20 Ft 77L Outer Spine	30 Ft 77L Tapered Tip
80	1	—	—	—	1	1
90	1	1	—	—	1	1
100	1	—	1	—	1	1
110	1	1	1	—	1	1
120	1	—	2	—	1	1
130	1	—	—	1	1	1
140	1	1	—	1	1	1
150	1	—	1	1	1	1
160	1	1	1	1	1	1
170	1	—	2	1	1	1
180	1	—	—	2	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 the Company's policy of constant product improve these specifications subject to change without notice without incurring responsibility to units previously so

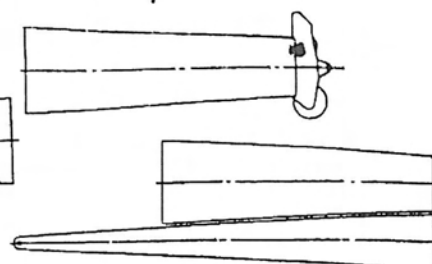


8460 TRAVELING WEIGHTS

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	X	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	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 $\pm 3\%$ should be allowed on these weights.

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



MODEL 8460 TRUCK CRANE RATINGS IN POUNDS
77L TAPERED TIP--68,500 LBS EXTENDED CTWT
AMERICAN CARRIER

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

The boom hoist line is 14 parts of .75" diameter 6 x 26, WS, FW, RAL, IWRC, EIPS wire rope with a minimum breaking strength of not less than 58,800 pounds.

Pendant suspension line is 4 parts of 1.25" diameter AAA high strength wire rope with a minimum breaking strength of 175,800 pounds.

Main load line is 1.0" diameter 6 x 25, FW, RRL, IWRC, EIPS wire rope with a minimum breaking strength of not less than 103,400 pounds.

Erection over the rear end with A-frame fully raised, outriggers extended and set. Erection over the side with A-frame fully raised, outriggers extended and set. Blocks, slings and other load carrying devices must be on the ground during erection.

Combinations of boom or boom and jib with a total length exceeding 350' can be operated at full rated capacity only in wind speeds of 15 mph or less. If lifts are to be performed in winds between 15 mph and 25 mph, ratings must be reduced 10%. No operation of the above combinations should be attempted in wind speeds over 25 mph. The above limitations do not take into account loads with excessive surface area which are not restrained by tag lines.

BOOM COMPOSITION CHART							
BOOM LENGTH (FEET)	30' 77L OUTER	10' 77S CENTER	20' 77S CENTER	50' 77L CENTER	20' 77L CENTER	30' 77L OUTER	TAPERED TIP
80	1	0	0	0	1	1	1
90	1	1	0	0	1	1	1
100	1	0	1	0	1	1	1
110	1	1	1	0	1	1	1
120	1	0	2	0	1	1	1
130	1	0	0	1	1	1	1
140	1	1	0	1	1	1	1
150	1	0	1	1	1	1	1
160	1	1	1	1	1	1	1
170	1	0	2	1	1	1	1
180	1	0	0	2	1	1	1
190	1	1	0	2	1	1	1
200	1	0	1	2	1	1	1
210	1	1	1	2	1	1	1
220	1	0	2	2	1	1	1
230	1	0	0	3	1	1	1
240	1	1	0	3	1	1	1
250	1	0	1	3	1	1	1
260	1	1	1	3	1	1	0
270	1	0	2	3	1	1	0
280	1	0	0	4	1	1	0



MODEL 8460 TRUCK CRANE RATINGS IN POUNDS
77L TAPERED TIP - 68,500 LBS EXTENDED CTWT
AMERICAN CARRIER

LOAD HOISTING INFORMATION			
MAXIMUM LIFTING CAPACITY - LBS	MINIMUM PARTS OF LINE	MAXIMUM HOISTING DISTANCE	
		MAIN DRUM	AUXILIARY DRUM
176,410	6	150'	110'
147,710	5	180'	133'
118,170	4	225'	166'
88,620	3	301'	221'
59,080	2	451'	332'
29,540	1	903'	665'

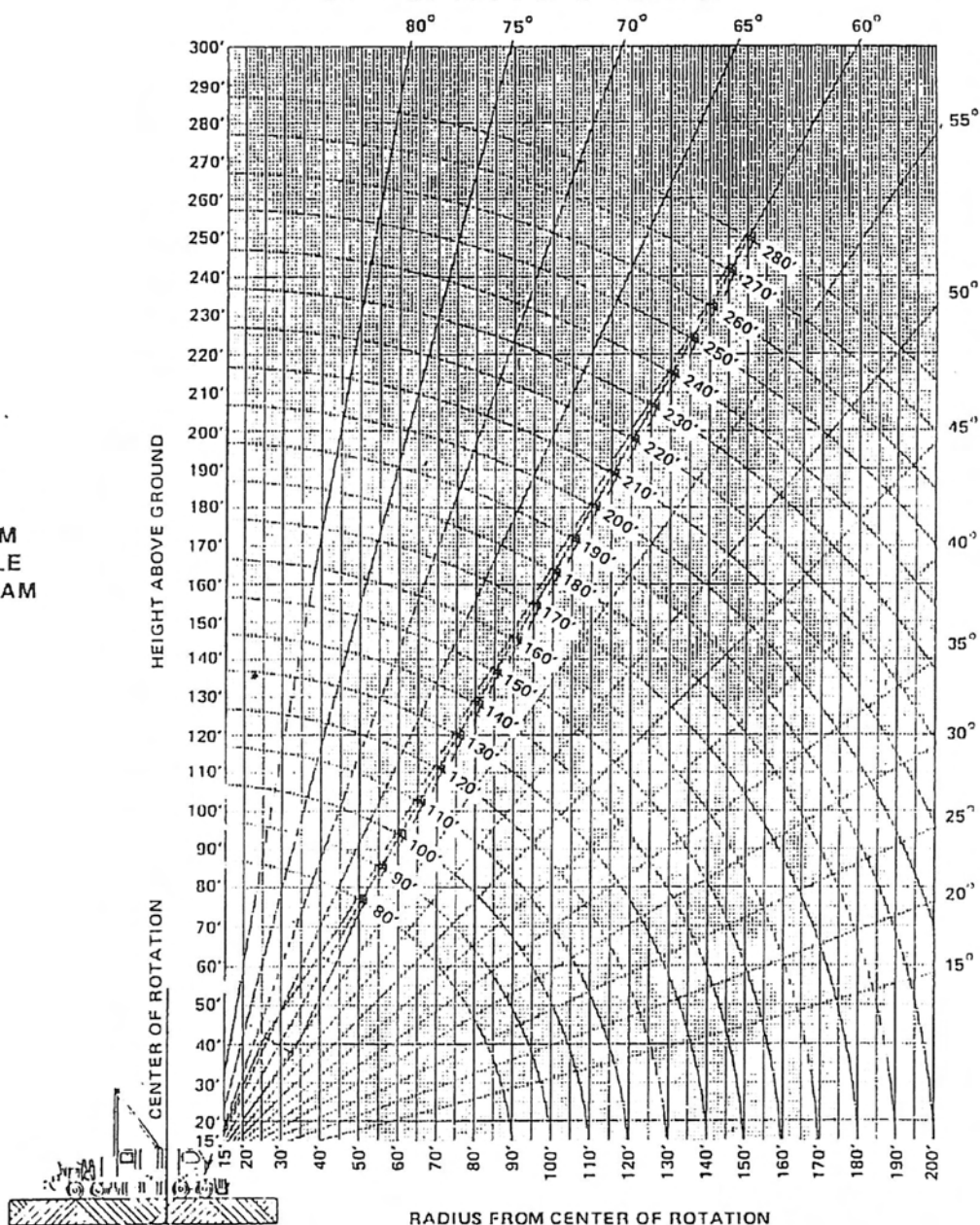
MAXIMUM BOOM AND JIB SELF-ERECTION DATA						
	OVER THE END		OVER THE SIDE		SEE NOTE	
	BOOM LENGTH	JIB LENGTH	BOOM LENGTH	JIB LENGTH	BOOM LENGTH	JIB LENGTH
#9HL JIB	280'	0'	260'	0'	280'	0'
	270'	0'	250'	0'	270'	80'
	260'	0'	240'	40'		
	250'	60'	230'	80'		
	240'	80'	260'	0'		
#16HL JIB	280'	0'	250'	0'	280'	0'
	270'	0'	240'	0'	270'	0'
	260'	40'	230'	70'	260'	100'
	250'	50'				
	240'	80'				

NOTE: ERECTION OVER THE END WITH 18,000 LBS FRONT BUMPER COUNTERWEIGHT IN PLACE.

ALL RATINGS ARE BASED ON COUNTERWEIGHT BEING EXTENDED TO ITS NORMAL OPERATING POSITION.

AMERICAN MODEL 8460 TRUCK CRANE WORKING RANGES

BOOM
ANGLE
DIAGRAM



3JR816

FORM NO. 8460-TR-1

PRINTED IN U.S.A.



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 thermodynamically controlled radiator shutters.

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

ELECTRICAL: 12 volt system; 500 watt alternator; two — 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

RT AXLES: Shuler FTCA-34-L-30 in tandem. 0# 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 24XRB — 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 Counterweight)	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.



800 SERIES TRUCK CRANE SPECIFICATIONS

UPPER MACHINERY

POWER: Detroit Diesel (GM) 8V-71N model 7083-7000 diesel engine driving through dry clutch and gear box to hydrostatic pumps, eight cylinder, 4-1/4" bore, 5" stroke 568 cu. in. displacement, net rated 268 HP (gross 304 HP) @ 2100 RPM full load, 24 volt electric starting.

FUEL TANK: 120 gallon capacity.

PRIMARY DRIVE: Hydrostatic transmission system for swing, main and auxiliary hoist, and boom hoist.

COUNTERWEIGHT: Consists of a basic lower casting of 30,000 pounds. Three additional castings stack on top of basic slab for a total weight of 68,000 pounds.

Counterweight is hydraulically extended or retracted two feet, providing 14 foot or 16 foot tailswing. The normal operating condition is with the counterweight in the extended position. When lifting over the side without outriggers set, the counterweight may be retracted to improve backward stability.

Counterweight is removed by hydraulically extending it onto ramps provided on the carrier — removing connecting bolts — and off loading the four cast counterweight sections utilizing lifting sheaves provided in the boom inner section.

RETRACTABLE A-FRAME: Retractable A-frame is hydraulically raised and lowered.

TURNTABLE BEARING: Single unit bullgear and roller bearing has three roller paths to absorb all axial, uplift and thrust loading. Designed for high capacity, the bearing equally distributes loads.

ROTATING MACHINERY DECK: Is fabricated of high strength steel of deep girder construction. Deck is jig drilled and line bored by modern computer controlled machinery for accuracy and proper fit of replacement parts.

DRIVE SHAFT: Drive shaft is mounted in pressure grease lubricated anti-friction bearings. Splined to shaft is a high torque low speed motor and pinion. This shaft assembly has a single purpose of speed reduction and is not compromised by mounting clutches for other functions.

HYDROSTATIC SWING: Hydrostatic swing provides smoother operation for heavy erection and long boom use. A variable displacement piston pump is directly driven off the rear of the engine. This pump supplies hydraulic fluid to one high torque low speed motor which revolves the upperworks through a one gear reduction. Swing speed is substantially independent of engine speed.

The swing brake is spring set and air released to prevent the upper from revolving in the event of loss of

air. The swing brake has dual control. The control lever stand permits variable pressure from "release" to "set" and side motion of the swing lever applies varying air pressure to the swing brake.

MAIN DRUM ASSEMBLY: The hydraulically powered main drum assembly has infinitely variable speed control, controlled load lowering, free fall capability and the ability to "float" a load.

Twin ductile iron drums, with stress relieved brake and clutch surfaces, are mounted on anti-friction bearings on main drum shaft. The main drum shaft is also mounted in anti-friction bearing pillow block.

Internal expanding clutches are activated by highly responsive variable air controls. Cooling fins on brake and clutch rings assures maximum dissipation of heat. Brake shafts and pins are mounted in anti-friction bearings for responsive operation with minimum air pressure from the operator.

A spring set, air released brake mechanism on the drum, controllable from the operator's level stand, actuates automatically in the event there is a loss of air during crane operation. These external contracting brakes are capable of suspending a rated load indefinitely without further effort from the operator, and function under all conditions of brake temperature, lining wear, provided the brake mechanisms receive proper adjustment.

CONTROLLED LOAD LOWERING: Hydrostatic controlled load lowering is standard for both drums.

THIRD DRUM: (OPTIONAL) The third drum shaft which is mounted in anti-friction bearing pillow block is located forward and below the main hoist drum.

The third drum and the air actuated, internal expanding clutch assembly are splined to the steel drum shaft. The driving gear is keyed to the end of the drum shaft and is mounted on anti-friction bearings on the drum shaft. The brake is an external contracting band on the third drum flange.

BOOM HOIST: The two boom hoist drums are driven by a high torque-low speed hydraulic motor on drum shaft end.

The boom hoist brake is a spring set, air released external contracting band located on both drums on boom hoist drum shaft.

A hand lever operated air valve controls both raising and lowering of the boom. The boom hoist brake sets automatically when lever is in neutral position. The spring set, air released locking device located on the left boom hoist drum, holds the boom during operation or when machine is idle.

CONTROLLED BOOM LOWERING: Hydrostatic controlled boom lowering is standard.

