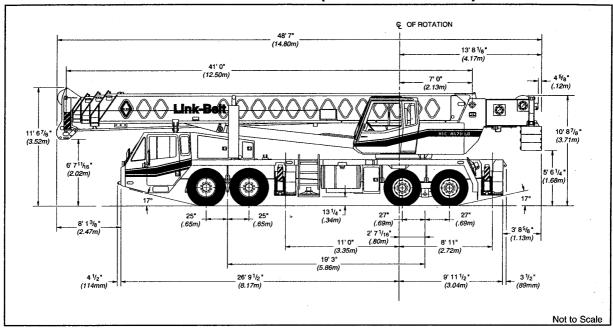
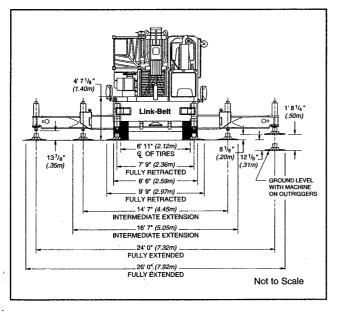


# Specifications

Hydraulic Truck Crane (Long Boom)

# HTC-8670LB 70-ton (63.5 metric ton)





General Dimensions	feet	meters
Turning radius (curb to curb)	41'7"	12.67
Turning radius (wall to wall)	51' 9"	15.77
Ground clearance	13-1/4"	.34
Tailswing	13' 9"	4.19



# **Upperstructure**

#### Boom

Patented Design. Boom side plates have diamond shaped impressions for superior strength to weight ratio and 100,000 p.s.i. (689.5 MPa) steel angle chords for lateral stiffness. Boom telescope sections are supported by top, bottom, and adjustable side wear shoes to prevent metal to metal contact.

Microguard 434, Rated Capacity
Limiter "RCL" - Standard; Graphic
audio-visual warning system built into
corner post with anti-two block and
function limiters. Operating data available
includes boom length, boom angle, head
height, radius of load, machine configuration, allowed load, actual load and
percent of allowed load. Presettable
alarms for maximum and minimum boom
angles, max. tip height, max. boom
length, swing left/right positions. Operator
defined area alarm is standard. Anti-two
block weight designed for quick reeve of
hookblock.

Optional; Load rating bar graph for quick operator reference.

**Boom** — 41' - 127' *(12.50 -38.71 m)* for rection full-power boom.

1. ...lode Boom Extension — The basic mode is the full power, synchronized mode of telescoping all sections proportionally to 127' (38.71 m).

The exclusive **A-max** mode (or mode 'A') extends only the inner mid section to 69.6' (21.21 m) offering increased capacities for in-close, maximum capacity picks.

**Boom head** — Five, 16 1/2" (0.42 m) root diameter nylon sheaves to handle up to 10 parts of wire rope. Easily removable wire rope guards; rope dead end lugs provided on each side of boom head. Boom head designed for quick reeve of hook block.

**Auxiliary lifting sheave** — *Optional;* Single, 16 1/2" (0.42 m) root diameter nylon sheave with removable wire rope guard, mounted to boom. For use with one or two parts of line off the optional front winch. Does not affect erection of fly or use of main head sheaves for multiple reeving.

**Boom elevation** — One Link-Belt designed hydraulic cylinder with holding valve and bushings in each end. Hand control for controlling boom elevation f 3° to + 78°.

## **F**ly

Optional — 39' 6" (12.04 m) offsettable stowable one-piece lattice fly. Can be offset 2°, 20°, or 40°.

Optional - 39' 6" - 67' (12.04 - 20.42 m) offsettable stowable 2-piece lattice type. Can be offset 2°, 20°, or 40°.

#### Cab and Controls

Environmental **ULTRA-CAB™** composed of laminated fibrous composite material; isolated from sound with acoustical fabric insulation, all tinted/tempered safety glass windows. Sliding rear/right side windows and swing-up roof window for maximum visibility and ventilation. Slideby-door opens to 36" (0.91 m) width. 6-way adjustable seat. Hydraulic control levers (joystick type). Hand-held outrigger controls and sight level bubble also provided. Foot controls for boom telescope, swing brake, and engine throttle. Hand throttle with lock.

Cab Instrumentation — Corner post mounted gauges for hydraulic oil temperature, fuel, water temperature, voltmeter and oil pressure. Audio/visual warning system. Check engine and stop engine indicator lights.

## Swing

Bi-directional hydraulic swing motor mounted to a planetary reducer for 360° continuous smooth swing at 2 r.p.m.

**Swing park brake** — 360°, electric over hydraulic (spring applied, hydraulic released) multi-disc brake mounted on the speed reducer. Operated by toggle switch in overhead control console.

**Swing brake** — 360°, foot operated, hydraulic applied disc brake mounted on the speed reducer.

**Travel Swing lock** — Standard; two position travel swing lock (pin device) operated from the operator's cab.

Counterweight — Pinned to upperstructure frame. 12,000 lb. (5 443 kg) three piece design standard; 4,000 lbs. (1 814 kg) each piece. 16,000 lb. (7 258 kg) five piece design optional (dolly required for five piece arrangement). Hydraulic controlled counterweight removal standard. Counterweight sections may be lowered on and pinned to carrier deck to balance axle loadings for travel.

## Hydraulic System

**Main pump** — 2 gear pumps with a total of five sections. Combined pump capacity of 152 gpm (575 lpm). Powered by carrier engine with pump disconnect. Spline-type pump disconnect engaged/disengaged from carrier cab. Max. system operating pressure is 3,500 psi (24 133 kPa). Hydraulic oil cooler standard.

Pilot Pressure / Counterweight Removal
Pump — Pressure compensated piston
pump powered by carrier engine with pump

pump powered by carrier engine with pump disconnect. Operates at 1,400 psi (9 653 kPa) maximum.

Steering / Fifth Outrigger Pump — Single gear type pump, 8 gpm (30 lpm) maximum. Powered by carrier engine through front gear housing. Pump operates at 1,600 psi (11 032 kPa).

**Reservoir** — 169 gallon *(639.7 L)* capacity. One diffuser for deaeration.

**Filtration** — One 6-micron filter located inside hydraulic reservoir. Accessible for easy replacement.

**Control valves** — 6 separate pilot operated control valves allow simultaneous operation of all crane functions.

### Load Hoist System

Standard — 2M main winch with twospeed motor and automatic brake; power up/down mode of operation. Bi-directional piston-type hydraulic motor, driven through planetary reduction unit for positive control under all load conditions. Asynchronous parallel double crossover grooved drums minimize rope harmonic motion. Winch circuit control provides balanced oil flow to both winches for smooth, simultaneous operation.

Optional — 2M auxiliary winch with twospeed motor, automatic brake, and winch function lockout. Power up/down modes.

**Line pulls and speeds** — Maximum available line pull 17,100 lbs. *(7757 kg)* and maximum line speed of 495 f.p.m. *(150.88 m/min)* on 16" *(0.41 m)* root dia. grooved drum.

# Additional EquipmentStandard

Fire extinguisher, seat belt, horn, dome light, mirrors, electric windshield wiper/ washer, top hatch window wiper, defroster fan, sun screen, cup holder, backup alarm, audible swing alarm, electronic drum rotation indicators, cabmounted work lights, fly pinning alignment tool, and rotation resistant wire rope.

# Additional EquipmentOptional

360° swing lock (meets New York City requirements), diesel or hydraulic heater, 40 (36.31), 60 (54.41), and 70-ton (63.51) quick reeve hook block, 8-1/2 ton (7.71 ml) hook and ball, rotating beacon, boom floodlight, air conditioning and single axis controls.



#### Carrier

## Type

8' 6" (2.59 m) wide, 231" (5.87 m) wheelbase.

Standard - 8 x 4 drive.

**Frame** - 100,000 p.s.i. (689.5 MPa) steel, double walled construction with integral 100,000 p.s.i. (689.5 MPa) steel outrigger boxes.

#### Axles

Front - Tandem, 83.4" (2.12 m) track.

**Rear -** Tandem, 72.8" *(1.85 m)* track. 6.17 to 1.0 ratio with interaxle differential with lockout.

#### Suspension

Front axle - Leaf spring suspension

**Rear axle -** Solid mount bogie beam type.

#### Wheels

Standard - Hub piloted steel disc

Optional- Hub piloted aluminum disc

#### Tires

**Standard Front** - 445/65R22.5 (Load range "L") single tubeless radials.

**Standard Rear** - 12R22.5 (Load range "H") dual tubeless radials.

Optional Front - 425/65R22.5 (Load range "L") single tubeless radials.

#### Brakes

**Service** - Full air brakes on all wheel ends with automatic slack adjusters. Dual circuit with modulated emergency brakes.

Front - 16.5 x 6 S-Cam brakes Rear - 16.5 x 7 S-Cam brakes

**Parking/emergency** — One spring set, air released chamber per rear axle end. Parking brake applied with valve mounted on carrier dash. Emergency brakes apply automatically when air drops below 60 psi (413.7 kPa) in both systems.

### Steering

Sheppard rack and pinion design.

#### Transmission

Eaton RTO — 14909MLL; 11 speeds forward, 3 reverse.

#### Electrical

Four 12-volt batteries provide 12-volt starting; 2,800 cold cranking amps available. 12-volt operating system, 130 amp alternator.

**Lights** - Four dual beam sealed headlights, front, side, and rear directional signals, stop and tail lights, rear and side clearance lights, license plate light and hazard warning lights.

#### Outriggers

Three position (fully extended, intermediate and fully retracted) operation capability. Power hydraulic, double box, dual beam outriggers, front and rear. Recessed vertical jack cylinders, each equipped with integral holding valve. Beams extend to a maximum 24' 0" (7.32 m) centerline-to-centerline and retract to within 8' 6" (2.59 m) overall width. Equipped with four stowable, lightweight 24" (0.61 m) diameter aluminum floats. Standard fifth outrigger. with 14-3/4" (.37 m) dia. self-storing steel pad, is operable from ground or operators cab. Sight level bubble located in upperstructure cab.

Confined Area Lift Capacities (CALC) System - Outriggers may be extended to an intermediate position (14' 7" - 4.45 m spread) for working in confined areas. Inner and outer beams are connected by an extend position pin which allows the outrigger beams to be fully extended or limits them to intermediate length based on the selected pin position. In addition, capacities are available with the beams in the 7' 9" (2.36 m) fully retracted position.

#### Carrier Cab

One-man cab of LFC•2000 construction process featuring laminated fibrous composite material; acoustical insulation with cloth covering. Equipped with electric windshield wiper and washer, horn, air ride seat with seat belt, dome light, ashtray, defroster, 36,000 BTU capacity heater, door and windows locks, fire extinguisher, LH/RH rear view mirrors, tilt steering wheel, sliding RH and rear tinted windows, and roll up/down LH tinted window.

Cab Instrumentation - Standard; illuminated instrument panel, speedometer, odometer, tachometer, voltmeter, hourmeter, fuel gauge, oil pressure gauge, water temperature gauge, front and rear air pressure gauges, audio/visual warning system, automotive type ignition, turn signal indicator, high beam light switch, fuses, and check engine and stop engine indicator lights.

# Additional EquipmentStandard

Aluminum fenders, carrier mounted outrigger controls with throttle control, cruise control, desiccant type air dryer, back-up warning alarm, tow hooks and shackles, steps to upper cab, lower cab and rear carrier, mud flaps, 120V electric engine block heater and engine brake.

# Additional EquipmentOptional

Ether injection starting package, rotating beacon, pintle hook, carrier mounted storage box, electrical and air connections for trailers and boom dollies, aluminum disc wheels, and spare tire and wheel assemblies.

# Carrier Speeds

			Speed	
Gear		Ratio	mph	km/h
	8th	.73	58.20	93.65
High	7th	1.00	42.49	68.36
	6th	1.38	30.79	49.54
	5th	1.95	21.79	35.06
·	4th	2.77	15.34	24.68
	3rd	3.79	11.21	18.04
Low	2nd	5.23	8.12	13.07
	1st	7.41	5.73	9.23
	LO	16.30	2.61	4.19
Deep	LL2	11.85	3.59	5.77
Reduction	LL1	26.08	1.63	2.62
Hi Rev.	Rev.	4.15	10.24	16.47
Lo Rev.	Rev.	15.76	2.70	4.34
Deep				
Reduction	Rev.	25.21	1.69	2.71
Deep				
Reduction	LL1	26.08	0.47	0.75
@ 600 rpm				
Deep				
Reduction	Rev.	25.21	0.48	0.77
@ 600 rpm				



### Engine Specifications

jine	Detroit Diesel, Series 60 11.1L
Cylinders - cycle	6/4
Bore	5.12" <i>(130 mm)</i>
Stroke	5.47" (139 mm)
Displacement	677 cu. in. (11 096 cm³)
Maximum brake hp	365 @ 1800 rpm; 350 @ 2100 rpm
Peak torque	1,350 ft. lbs. (1 831 J) @ 1200 rpm
Electric system	12 volt neg. ground
Fuel capacity	100 gallons (378.5 L)
Alternator	12 voit, 130 amps
Crankcase capacity	32 qts. <i>(30 L)</i>

Axle	Max. Load @ 65 mph <i>(105 km/hr)</i>
Front Front Rear	45,400 lbs. (20 593 kg) - aluminum disc wheels with 425/65R22.5 tires 46,400 lbs. (21 047 kg) - steel disc wheels with 445/65R22.5 tires 50,350 lbs. (22 838 kg) - steel or aluminum disc wheels

#### Axle Loads

Base machine with standard 41' 0" - 127' 0"	G.V.W. <sup>①</sup>		Upper facing front			
(12.50 m - 38.71 m) four-section boom, 2M main winch with 2-speed hoisting			Fro	nt axle	Rea	r axle
and power up/down, 670' (183 m) 3/4" (19 mm) wire rope, 8x4, 8' 6" (2.59 m)	lbs.	kg	lbs.	kg	lbs.	kg
carrier with Detroit Diesel Series 60 engine, 100 gal. (378 L) fuel, and no counterweight.	78,446	35583	37,775	17135	40,671	18448
Cold weather starting aids - propane & ether	40	18	57	26	-17	-8
Aluminum storage box	57	26	16	7	41	19
425/65R22.5 front tires w/aluminum	] 3'	20	"	/	4'	13
disc wheels	-408	-185	-408	-185	0	О
12B22.5 rear tires w/aluminum	700	"00	-00	100	ľ	
disc wheels	-368	-167	0	0	-368	-167
Driver in carrier cab	200	91	254	115	-54	-24
shackles	40	18	23	10	17	8
utle hook with air & electrical connections	30	14	-12	-5	42	19
Air conditioning in carrier cab	100	45	127	57	-27	-12
Auxiliary winch w/670' (183 m) rope -front	899	408	-388	-176	1,287	584
Hydraulic heater	170	77	1	.5	169	76.5
Diesel heater	70	32	1	.5	69	31.5
Air conditioning in upper cab	120	54	-4	-2	124	56
One slab of ctwt. on upper	4,000	1 814	-2,140	-971	6,140	2 785
Two slabs of ctwt. on upper	8,000	3 629	-4,281	-1 942	12,281	5 571
Three slabs of ctwt. on upper	12,000	5443	-6,421	-2913	18,421	8 356
Three slabs of ctwt. on upper plus two cheek weights	16,000	7258	-8,661	-3929	24,561	11,141
Fly brackets on boom base section	]					
for fly options	160	72	149	68	11	5
39' 6" (12.04 m) fly stowed	1,602	727	1,550	703	52	24
39' 6" - 67' (12.04 - 20.42 m) two-piece fly	2,380	1080	2,010	912	370	168
40-ton (36t) hook block at front bumper	720	327	1,175	533	-455	-206
70-ton (63.5t) hook block at front bumper	1,400	635	2,284	1 036	-884	-401
Hookball at front bumper	360	163	587	266	-227	-103
Auxiliary arm	110	50	203	92	-93	-42
		<del> </del>	Front	axle	Rear	axle
Transfer one slab of ctwt. to carrier deck			5,333	2419	-5,333	-2 419
Transfer two slabs of ctwt, to carrier deck			10.666	2419 4838	-5,333 -10,666	-2 4 19 -4 838
Transfer three slabs of ctwt. to carrier deck			15,999	7 257	-15,999	-4 636 -7 257

djust gross vehicle weight & axle loading according to component weight. Note: All weights are  $\pm$  3%



# Lifting Capacities

Telescopic Hydraulic Truck Crane

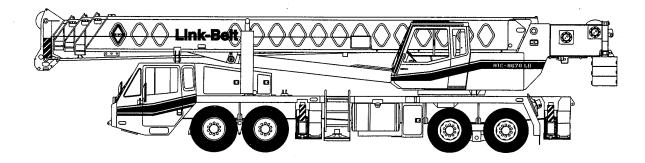
# **HTC-8670LB**

**70-ton** *(63.5 metric ton)* 

Boom and fly capacities for this machine are listed by the following sections:

#### **Fully Extended Outriggers**

- Working Range Diagram (0, 4,000, 8,000, 12,000 and 16,000 lb. Counterweight)
- 41' to 69' 6" main boom capacities, A-max Mode
- 41' to 127' main boom capacities, Basic Mode "B"
- 39' 6" offset fly capacities, Basic Mode "B" (4,000, 8,000, 12,000 and 16,000 lb. Counterweight)
- 39' 6" to 67' Two-piece offsettable fly capacities, Basic Mode "B" (8,000, 12,000 and 16,000 lb. Counterweight)



CAUTION: This material is supplied for reference only. Operator must refer to in-cab crane rating manual to determine allowable machine lifting capacities and operating procedures.



# **Table of Contents**

Page	Contents
5 5 5	Operating Instructions <b>A-max</b> Mode & Basic Mode "B" Boom Extension Diagram Winch Performance Wire Rope Strength
55	Hydraulic Circuit Pressure Settings Capacity Deductions For Auxiliary Load Handling Equipment Tire Inflation
5 5	
	Fully Extended Outriggers
7 8	Working Range Diagram (0 lbs. Counterweight) Main Boom Lifting Capacities (0 lbs. Counterweight) Working Range Diagram (4,000 lbs. Counterweight) Main Boom Lifting Capacities (4,000 lbs. Counterweight)
10	Fly Lifting Capacities (4,000 lbs. Counterweight)
12 13	Working Range Diagram (8,000 lbs. Counterweight) Main Boom Lifting Capacities (8,000 lbs. Counterweight) Fly Lifting Capacities (8,000 lbs. Counterweight) Working Range Diagram (12,000 lbs. Counterweight)
15 16	Main Boom Lifting Capacities (12,000 lbs. Counterweight) Fly Lifting Capacities (12,000 lbs. Counterweight) Working Range Diagram (16,000 lbs. Counterweight)
18	Main Boom Lifting Capacities (16,000 lbs. Counterweight) Fly Lifting Capacities (16,000 lbs. Counterweight)







## **Operating Instructions**

# OPERATING INSTRUCTIONS GENERAL:

- Rated lifting capacities in pounds as shown on lift charts pertain to this crane as originally manufactured and normally equipped. Modifications to the crane or use of optional equipment other than that specified can result in a reduction of capacity.
- Construction equipment can be dangerous if improperly operated or maintained. Operation and maintenance of this crane must be in compliance with the information in the Operator's, Parts, and Safety Manuals supplied with this crane. If these manuals are missing, order replacements through the distributor.
- The operator and other personnel associated with this crane shall read and fully understand the latest applicable American National Standards ASME B30.5 safety standards for cranes.
- 4. The rated lifting capacities are based on crane standing level on firm supporting surface.

#### SET UP:

- The crane shall be leveled on a firm supporting surface. Depending on the nature of the supporting surface, it may be necessary to have structural supports under the outrigger pontoons or tires to spread the load to a larger bearing surface.
- When making lifts on outriggers, all tires must be free of supporting surface. All outrigger beams must be extended to the same length; fully retracted, intermediate extended, or fully extended. The front bumper outrigger must be properly extended.
- When operating on fully retracted outriggers, do not exceed 67° maximum boom angle with 16,000 lb. counterweight, or 73° maximum boom angle with 12,000 lb. counterweight. Loss of backward stability will occur causing a backward tipping condition.
- When making lifts on tires, they must be inflated to the recommended pressure. (See Operation note 20 and Tire Inflation.)
- Before swinging boom to over side position on tires, or on fully retracted outriggers where capacities are not published, boom sections must be fully retracted and 50° boom angle maintained.

- For required parts of line, see Wire Rope Capacity and Winch Performance.
- Before setting up on outriggers or tires, refer to Working Range Diagrams and rated lifting capacities to determine allowable crane configurations.

#### **OPERATION:**

- 1. Rated lifting capacities at rated radius shall not be exceeded. Do not tip the crane to determine allowable loads. For concrete bucket operation. weight of bucket and load shall not exceed 80% of rated lifting capacities. For clamshell bucket operation, weight of bucket and bucket contents is restricted to a maximum weight of 7,000 pounds or 80% of rated lifting capacity, whichever is less. For magnet operation, weight of magnet and load is restricted to a maximum weight of 7.000 pounds or 80% of rated lifting capacity. whichever is less. For clamshell and magnet operation, maximum boom length is restricted to 60 ft. and the boom angle is restricted to a minimum of 35 degrees. Lifts with either fly erected is prohibited for both clam and magnet operation.
- Rated lifting capacities shown on fully extended outriggers do not exceed 85% of the tipping loads. Rated lifting capacities shown on intermediate extended or fully retracted outriggers are determined by the formula, rated load = (tipping load 0.1 X load factor)/1.25. Rated lifting capacities shown on tires do not exceed 75% of the tipping loads. Tipping loads are determined by SAE crane stability test code J-765.
- Rated lifting capacities in the shaded areas are based on structural strength or hydraulic limitations and have been tested to meet minimum requirements of SAE J-1063 cantilevered boom crane structures method of test. The rated lifting capacities in non-shaded areas are based on stability ratings. Some capacities are limited by a maximum obtainable 78° boom angle.
- 4. Rated lifting capacities include the weight of the hook ball/block, slings, bucket, magnet and auxiliary lifting devices. Their weights must be subtracted from the listed rated capacity to obtain the net load which can be lifted. Rated lifting capacities include the deduct for either fly stowed on the base of the boom. For deducts of either fly



#### Operating Instructions (continued)

- erected, but not used, see Capacity Deductions For Auxiliary Load Handling Equipment.
- Rated lifting capacities are based on freely suspended loads. No attempt shall be made to move a load horizontally on the ground in any direction.
- Rated lifting capacities are for lift crane service only.
- Do not operate at radii or boom lengths (minimum or maximum) where capacities are not listed. At these positions, the crane can tip or cause boom failure.
- 8. The maximum loads which can be telescoped are not definable because of variation in loadings and crane maintenance, but it is permissible to attempt retraction and extension within the limits of the applicable load rating chart.
- 9. For main boom capacities when either boom length or radius or both are between values listed, proceed as follows:
  - a. For boom lengths not listed, use rating for next longer boom length or next shorter boom length, whichever is smaller.
  - b. For load radii not listed, use rating for next larger radius.
- 10. The user shall operate at reduced ratings to allow for adverse job conditions, such as: soft or uneven ground, out of level conditions, wind, side loads, pendulum action, jerking or sudden stopping of loads, hazardous conditions, experience of personnel, traveling with loads, electrical wires, etc. Side load on boom or fly is dangerous and shall be avoided.
- Rated lifting capacities do not account for wind on suspended load or boom. Rated capacities and boom length shall be appropriately reduced as wind velocity approaches 20 mph.
- When making lifts with auxiliary head machinery, the effective length of the boom increases by 2 ft.
- Power sections of boom must be extended in accordance with boom mode "A" or "B". In boom mode "B" all power sections must be extended or retracted equally.
- The least stable rated working area depends on the configuration of the crane set up.
- 15. Rated lifting capacities are based on correct reeving. Deduction must be made for excessive reeving. Any reeving over minimum required (see Wire Rope Capacity) is considered excessive and must be accounted for when making lifts. Use Working Range Diagram to estimate the extra feet of rope then deduct 1 lb. for each extra foot of wire rope before attempting to lift a load.

- 16. The loaded boom angle combined with the boom length give only an approximation of the operating radius. The boom angle, before loading, should be greater to account for deflection. For main boom capacities, the loaded boom angle is for reference only. For fly capacities, the load radius is for reference only.
- 17. For fly capacities with main boom length less than 127 ft. and greater than 100 ft., the rated capacities are determined by the boom angle using the 127 ft. boom and fly chart. For angles not shown use the next lower boom angle to determine the rated capacity.
- 18. For fly capacities with main boom length less than 100 ft., the rated capacities are determined by the boom angle only using the 100 ft. boom and fly chart. For angles not shown, use the next lower boom angle to determine the rated capacity.
- The 41 ft. boom length structural lifting capacities are based on boom fully retracted. If the boom is not fully retracted, do not exceed capacities shown for the 50 ft. boom length.
- 20. Rated lifting capacities on tires depend on tire capacity, condition of tires, and tire air pressure. On tire capacities require lifting from main boom head only on a smooth and level surface. The boom must be centered over the rear of the crane with two position travel swing lock engaged and the load must be restrained from swinging. Pick and carry operations are restricted to maximum speed of 1 mph. For correct tire pressure, see Tire Inflation.

#### **DEFINITIONS:**

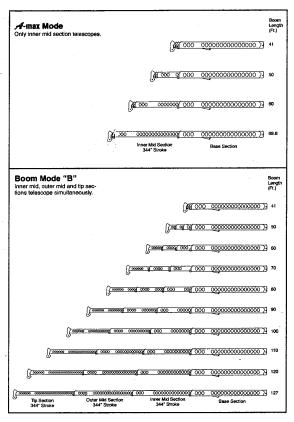
- Load Radius: Horizontal distance from a projection of the axis of rotation to the supporting surface, before loading, to the center of the vertical hoist line or tackle with load applied.
- Loaded Boom Angle: 
   \( \times \) The angle between the boom base section and horizontal with freely suspended load at the rated radius.
- Working Area: Area measured in a circular are about the center line of rotation as shown on the Working Area Diagram.
- Freely Suspended Load: Load hanging free with no direct external force applied except by the hoist line.
- 5. Side Load: Horizontal side force applied to the lifted load either on the ground or in the air.
- No Load Stability Limit: The radius or boom angle beyond which it is not permitted to position the boom because the crane can overturn without any load on the hook.
- Load Factor: Load applied at the boom tip which gives the same moment effect as the boom mass.











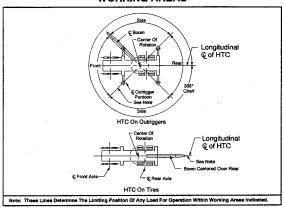
#### WINCH PERFORMANCE

Winch Line Pulls			D	
	Two Spe	Two Speed Winch		Capacity (Ft.)
Wire Rope	Low Speed	High Speed		
Layer	Available Lbs.*	Available Lbs.	Layer	Total
1	17,117	8,453	114	114
2	15,737	7,771	124	238
3	14,563	7,192	134	372
4	13,552	6,692	144	516
5	12,672	6,258	154	670
8	N/A	N/A	164	834
*Maximu	m lifting capacity: T	ype RB Rope=12,920	Type ZB Rope	=15,600

#### WIRE ROPE CAPACITY

Maximum Lifting Capacities Based On Wire Rope Strength				
Parts	3/4"	3/4"		
of Line	Type RB	Type ZB	. Notes	
1	12,920*	15,600	Capacities shown are in pounds and	
2	25,840	31,200	working loads must not exceed the ratings on the capacity charts in the Crane Rating	
3	38,760	46,800	Manual.	
4	51,680	62,400	Study Operator's Manual for wire rope	
5	64,600	78,000	inspection procedures.	
6	77,520	93,600	*Use of swivel end with 1 part of line is not recommended.	
7	90,440	109,200	i coomination	
8	103,360	124,800	1	
9	116,280	140,400		
10 .	129,200	156,000		
LBCE	DESCRIPTI	ON	h.,	
TYPE RB	16 X 19 Rotati Right Regular	ion Resistant - Lay	Compact Strand - High Strength Preformed,	
TYPE ZB	38 X 7 Rotatio	n Resistant - E	xtra Improved Plow Steel - Right Regular Lay	

#### **WORKING AREAS**



#### **HYDRAULIC CIRCUIT PRESSURE SETTINGS**

Function	Pressure (PSI)
Front And Rear Winch	3500
Outriggers	3000
Boom Hoist	3500
Telescope	3000
Swing	1500
Steering	2000
Bumper Outrigger	650
Pilot Control	500
Counterweight Removal	1700
Swing Park Brake Release	250

# CAPACITY DEDUCTIONS FOR AUXILIARY LOAD HANDLING EQUIPMENT

Load Handling Equipment	Weight (Lbs.
Auxiliary Head Attached	100
40 Ton Quick Reeve 4 Sheave Hook Block (See Hook Block For Actual Weight)	720
60 Ton Quick Reeve 4 Sheave Hook Block (See Hook Block For Actual Weight)	1100
70 Ton Quick Reeve 5 Sheave Hook Block (See Hook Block For Actual Weight)	1400
8.5 Ton Hook Ball (See Hook Ball For Actual Weight)	360
Lifting From Main Boom With:	
39.5 Ft. Or 67 Ft. Fly Stowed On Base (See Operation Note 4)	0
39.5 Ft. Offset Fly Erected But Not Used	4100
67 Ft. Offset Fly Erected But Not Used	8200
Lifting From 39.5 Ft. Offset Fly With:	
27.5 Ft. Fly Tip Erected But Not Used	PROHIBITED
27.5 Ft. Fly Tip Stowed On 39.5 Ft. Offset Fly	PROHIBITED
Note: Capacity deductions are for Link-Belt supplied equipment only.	

#### **TIRE INFLATION**

Tire Size	Operation	Tire Pressure (PSI)
12 R 22.5	1 MPH Stationary	120 120

#### **PONTOON LOADINGS**

Maximum Pontoon Load:	Maximum Pontoon Ground Bearing Pressure:
97,400 Lbs.	215 PSI

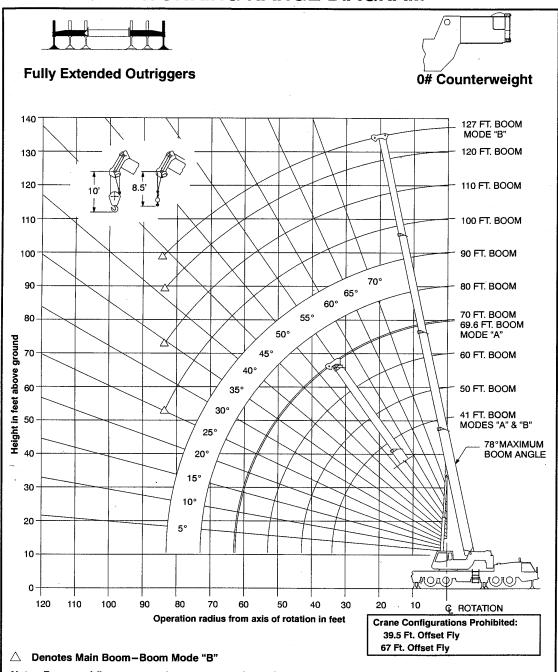
#### **OUTRIGGER SPREAD**

Position	Distance
Fully Retracted	(93") 7'-9"
Intermediate Extended	(175") 14'-7"
Fully Extended	(286") 24'-0"





# **WORKING RANGE DIAGRAM**



Note: Boom and fly geometry shown are for unloaded condition and crane standing level on firm supporting surface. Boom deflection, subsequent radius and boom angle change must be accounted for when applying load to hook.



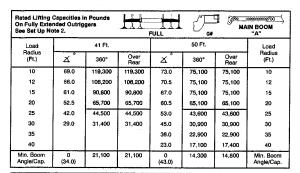
# WARNING

Do Not Lower The Boom Below The Minimum Boom Angle For No Load Stability As Shown In The Lift Charts For The Boom Lengths Given. Loss Of Stability Will Occur Causing A Tipping Condition.



#### Fully Extended Outriggers - Main Boom Capacities - 0 lb. Counterweight





Load		60 Ft.			69.6 Ft.		Load
Radius (Ft.)	Δ°	360°	Over Rear	Δ°	360°	Over Rear	Radius (Ft.)
10	76.5	74,000	74,000	1			10
12	74.5	74,000	74,000	76.5	43,900	43,900	12
15	71.5	74,000	74,000	74.5	43,900	43,900	15
20	66.0	64,600	64,600	70.0	43,900	43,900	20
25	60.5	42,800	42,800	65.5	42,300	42,300	25
30	54.5	30,200	30,200	60.5	29,700	29,700	30
35	48.0	22,400	22,400	55.5	22,000	22,000	35
40	41.0	16,600	17,100	50.0	16,200	16,700	40
45	32.5	12,500	13,200	44.0	12,100	12,900	45
50	21.0	9,400	10,200	37.5	9,100	10,000	50
55		ĺ		29.5	6,800	7,700	55
60				18.0	4,900	5,800	60
Min. Boom Angle/Cap.	0 (53.0)	7,600	8,600	0 (62.6)	4,000	4,900	Min, Boom Angle/Cap.

Note: Refer To Page 5 For "Capacity Deductions For Auxiliary Load Handling Equipment".

- X Loaded Boom Angle In Degrees.
- ( ) Reference Radius For Minimum Boom Angle Capacities (Shown in Parenthesia) Are in Feet.

	xtended Ou	es in Pounds triggers	##		0,	<u>{</u> ‱∕∞ MA	/∞ /∞ IN BOOM "B"
Load		41 Ft.			50 Ft.		Load
Radius (Ft.)	۸ů	360°	Over Rear	Χ°	360°	Over Rear	Redius (Ft.)
10	69.0	119,300	119,300	73.0	38,000	38,000	10
12	66.0	106,200	106,200	70.5	38,000	38,000	12
15	61.0	90,800	90,800	67.0	38,000	38,000	15
20	52.5	65,700	65,700	60.5	38,000	38,000	20
25	42.0	44,500	44,500	53.0	38,000	38,000	25
30	29.0	31,400	31,400	45.0	32,400	32,400	30
35				36.0	24,400	24,400	35
40		1 1		23.0	18,600	18,800	40
Min.Bm. Ang/Cap.	(34.0)	21,100	21,100	0 (43.0)	14,900	14,900	Min.Bm. Ang/Car

Load		60 Ft.			70 Ft.		Load
Radius (Ft.)	x°	360°	Over Rear	x°	360°	Over Rear	Radius (Ft.)
10	76.0	38,000	38,000				10
12	74.0	38,000	38,000	76.5	38,000	38,000	12
15	71.0	38,000	38,000	74.5	38,000	38,000	15
20	66.0	38,000	38,000	70.0	38,000	38,000	20
25	60.5	38,000	38,000	65.5	38,000	38,000	25
30	54.5	32,900	32,900	60.5	33,200	33,200	30
35	48.0	24,900	24,900	55.5	25,300	25,300	35
40	41.0	19,200	19,500	50.0	19,500	19,800	40
45	32.5	14,900	15,400	44.5	15,300	15,800	45
50	21.0	11,800	12,400	38.0	12,200	12,800	50
55				30.0	9,800	10,500	- 55
60				19.0	7,800	8,500	60
Min.Bm. Angle/Cap.	0 (53.0)	10,200	10,500	0 (63.0)	6,800	7,500	Min.Bm. Angle/Cap.

- Note: Refer To Page 5 For "Capacity Deductions For Auxiliary Load Handling Equipment".
- ∠ Loaded Boom Angle In Degrees.
- ( ) Reference Radius For Minimum Boom Angle Capacities (Shown in Parenthesis) Are in Feet.

On Fu		apacities ( led Outrig e 2.		H	FULL	H	O.	9 (*	<u> </u>	юом	
Load		80 Ft.			90Ft.			100 Ft.			
Radius (Ft.)	Χ°	360°	Over Rear	Χ°	360°	Over Rear	X°	360°	Over Rear	Radius (Ft.)	
15	76.5	38,000	38,000							15	
20	73.0	38,000	38,000	75.0	38,000	38,000	77.0	37,400	37,400	20	
25	69.0	38,000	38,000	72.0	38,000	38,000	74.0	32,700	32,700	25	
30	65.0	33,500	33,500	68.5	33,600	33,600	71.0	29,000	29,000	30	
35	60.5	25,500	25,500	65.0	25,600	25,600	68.0	25,700	25,700	35	
40	56.5	19,800	20,000	61.0	20,000	20,200	64.5	20,100	20,300	40	
45	51.5	15,500	16,100	57.0	15,700	16,200	61.0	15,600	16,300	45	
50	47.0	12,400	13,100	53.0	12,600	13,200	57.5	12,700	13,300	50	
55	41.5	10,000	10,800	48.5	10,200	10,900	54.0	10,300	11,100	55	
60	35.5	8,100	8,900	44.0	8,300	9,100	50.0	8,400	9,200	60	
65	28.0	6,500	7,300	39.0	6,700	7,500	46.0	6,600	7,600	65	
70	18.0	5,200	5,900	33.5	5,400	6,200	42.0	5,500	6,300	70	
75				26.5	4,300	5,000	37.0	4,400	5,200	75	
80				17.0	3,300	4.000	31.5	3,500	4,200	60	
Min.Bm. Angle/ Cap.	0 (73.0)	4,500	5,200	0 (83.0)	2,800	3,500	25.0 (85.0)			Min.Bm. Angle/ Cap.	

Note: Refer To Page 5 For "Capacity Deductions For Auxiliary Load Handling Equipment".

∠ Loaded Boom Angle in Degrees.

( ) Reference Radius For Minimum Boom Angle Capacities (Shown in Parenthesis) Are in Feet.

On Fu	lly Extend	ipacities i led Outrig		` <del>   </del>			_/°	9 6	<u>√∞ /∞</u> MAIN B	
See Se	t Up Note	2.			FULL		U 0#		MAIN B	
Load		110 Ft.			120 Ft.			127 Ft.		Loed
Radius (Ft.)	Δ°	360°	Over Rear	Δ°	360°	Over Rear	X°	360°	Over Rear	Radius (Ft.)
25	76.0	29,400	29,400	77.5	23,300	23,300	78.0*	19,600	19,600	25
30	73.5	26,200	26,200	75.0	23,300	23,300	76.0	19,600	19,600	30
35	70.5	23,500	23,500	72.5	21,500	21,500	74.0	19,600	19,600	35
40	67.5	20,200	20,400	70.0	19,400	19,400	71.5	18,400	18,400	40
45	64.5	15,900	16,400	67.5	16,000	16,500	69.0	16,000	16,400	45
50	61.5	12,700	13,400	64.5	12,800	13,500	66.5	12,800	13,500	50
55	58.5	10,400	11,200	61.5	10,500	11,200	64.0	10,500	11,300	55
60	55.0	8,500	9,300	58.5	8,800	9,300	61.0	8,600	9,400	60
65	51.5	6,900	7,700	55.5	7,000	7,800	58.0	7,000	7,600	65
70	48.0	5,600	6,400	52.5	5,700	6,500	55.5	5,700	6,500	70
75	44.0	4,500	5,300	49.5	4,800	5,400	52.5	4,700	5,400	75
80	40.0	3,600	4,400	46.0	3,700	4,400	49.5	3,700	4,500	80
65	35.5	2,800	3,500	42.5	2,900	3,600	46.0	2,900	3,700	85
Min.Bm. Angle/ Cap.	35.0 (86.0)			41.0 (86.5)			44.0 (87.5)			Min.Bm. Angle/ Cap.

Note: Refer To Page 5 For "Capacity Deductions For Auxiliary Load Handling Equipment".

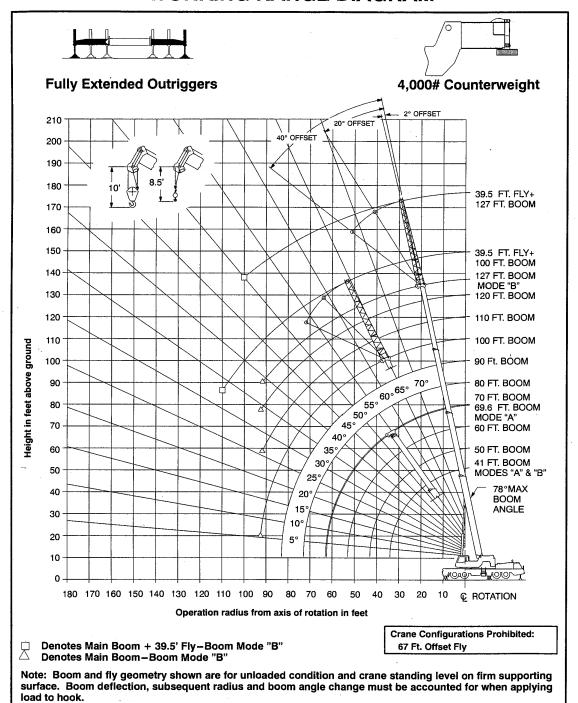
🔏 Loaded Boom Angle In Degrees.

( ) Reference Radius For Minimum Boom Angle Capacities (Shown in Parenthesis) Are in Feet.





# **WORKING RANGE DIAGRAM**



**WARNING** 

Do Not Lower The Boom Below The Minimum Boom Angle For No Load Stability As Shown In The Lift Charts For The Boom Lengths Given. Loss Of Stability Will Occur Causing A Tipping Condition.



# Fully Extended Outriggers - Main Boom Capacities - 4,000 lb. Counterweight



e Set Up I	tended Outri Note 2.	ggers	FU	11	4,000#	MA!	N BOOM "A"	
Load		41 Ft.		[	50 Ft.		Load	
Radius (Ft.)	Δ°	360°	Over Rear	x°	360°	Over Rear	Radius (Ft.)	
10	69.0	121,900	121,900	73.0	75,100	75,100	10	
12	66.0	108,600	108,600	70.5	75,100	75,100	12	
15	61.0	92,900	92,900	67.0	75,100	75,100	15	
20	52.5	68,100	68,100	60.5	67,600	67,600	20	
25	42.5	49,100	49,100	53.0	48,100	48,100	25	
30	29.0	34,900	34,900	45.5	34,300	34.300	30	
35				36.0	25,700	25,700	35	
40				23.0	19,600	19,800	40	
Min.Bm. Ang/Cap.	0 (34.0)	21,100	21,100	0 (43.0)	15,900	15,900	Min.8m. Ang/Cap	

Load		60 Ft.			69.6 Ft.		Load
Radius (Ft.)	X°	360°	Over Rear	X°	360°	Over Rear	Radius (Ft.)
10	76.5	74,000	74,000				10
12	74.5	74,000	74,000	78.5	43,900	43,900	12
15	71.5	74,000	74,000	74.5	43,900	43,900	15
20	68.0	67,100	67,100	70.0	43,900	43,900	20
25	80.5	47,400	47,400	65.5	43,900	43,900	25
30	54.5	33,700	33,700	60.5	33,200	33,200	30
35	48.5	25,200	25,200	55.5	24,600	24,800	35
40	41.0	19,500	19,500	50.0	19,100	19,100	40
45	32.5	15,000	15,200	44.0	14,600	14,900	45
50	21.0	11,600	12,000	37.5	11,300	11,800	50
55				29.5	8,700	9,300	55
60				18.5	6,600	7,200	60
Min.Brn. Ang/Cap.	0 (53.0)	9,800	10,300	0 (62.6)	5,600	6,200	Min.Bm. Ang/Cap.

Note: Refer To Page 5 For "Capacity Deductions For Audiliary Load Handling Equipment".

🔏 Loaded Boom Angle in Degrees.

( ) Reference Radius For Minimum Boom Angle Capacities (Shown in Parenthesis) Are in Feet.

On Fully		acities in d Outrigge 2.		<b>H</b>	FULL	#1	4,000	<u>.</u>	MAIN BO	BOOM	
Load		80 Ft.			90 Ft.			Load			
Radius (Ft.)	x°	360°	Over Rear	x°	360°	Over Rear	X°	360°	Over Rear	Radius (Ft.)	
15	76.5	38,000	38,000		<b>1</b>					15	
20	73.0	38,000	38,000	75.0	38,000	38,000	77.0	37,400	37,400	20	
25	69.0	38,000	38,000	72.0	38,000	38,000	74.0	32,700	32,700	25	
30	65.0	36,900	36,900	68.5	37,100	37,100	71.0	29,000	29,000	30	
35	61.0	28,200	26,200	65.0	28,400	28,400	68.0	26,000	26,000	35	
40	56.5	22,400	22,400	61.0	22,500	22,500	65.0	22,600	22,600	40	
45	52.0	18,000	18,100	57.0	16,200	18,200	61.5	18,300	18,400	45	
50	47.0	14,500	14,800	53.0	14,700	15,000	58.0	14,800	15,100	50	
55	41.5	11,900	12,400	49.0	12,100	12,500	54.0	12,200	12,700	55	
60	35.5	9,800	10,300	44.0	10,000	10,500	50.5	10,100	10,600	60	
65	28.0	8,100	8,600	39.0	8,300	8,600	46.5	6,400	8,900	65	
70	18.0	6,600	7,100	33.5	6,800	7,400	42.0	7,000	7,500	70	
75				26.5	5,800	6,100	37.0	5,800	6,300	75	
80				17.0	4,600	5,100	32.0	4,700	5,300	80	
85					1		25.5	3,800	4,300	85	
90							18.5	3,000	3,500	90	
Min.Bm. Ang/ Cap.	0 (73.0)	5,500	5,500	0 (83.0)	3,900	3,900	5.5 (92.8)			Min.Bm Ang/ Cap.	

Note: Refer To Page 5 For "Capacity Deductions For Auxiliary Load Handling Equipment".

 ${f \angle}$  Losded Boom Angle in Degrees.

( ) Reference Redius For Minimum Boom Angle Capacities (Shown in Parenthesis) Are in Feet.

e Set Up	tended Outri Note 2.		- <del>↓</del> À À		4,000#	MAII	N BOOM "B"
Load		41 Ft.			50 Ft.		Load
Radius (Ft.)	Δ°	360°	Over Rear	Δ°	360°	Over Rear	Radiu (Ft.)
10	69.0	121,900	121,900	73.0	38,000	38,000	10
12	66.0	108,600	108,600	70.5	38,000	38,000	12
15	61.0	92,900	92,900	67.0	38,000	38,000	15
20	52.5	68,100	68,100	60.5	38,000	38,000	20
25	42.5	49,100	49,100	53.0	38,000	38,000	25
30	29.0	34,900	34,900	45.0	35,900	35,900	30
35		ļ ·		36.0	27,100	27,100	35
40				23.0	21,100	21,100	40
Min.8m, Aлg/Сар.	0 (34.0)	21,100	21,100	0 (43.0)	14,900	14,900	Min.Bm Ang/Ca

				,			
Load		60 Ft.			70 Ft.		Load
Radius (Ft.)	Χ°	360°	Over Rear	X°	360°	Over Rear	Radius (Ft.)
10	76.0	38,000	38,000				10
12	74.0	38,000	38,000	76.5	38,000	38,000	12
15	71.0	38,000	38,000	74.5	38,000	38,000	15
20	66.0	38,000	38,000	70.0	38,000	38,000	20
25	60.5	38,000	38,000	65.5	38,000	38,000	25
30	54.5	36,400	36,400	60.5	36,700	36,700	30
35	48.0	27,700	27,700	55.5	28,000	28,000	35
40	41.0	21,800	21,800	50.0	22,200	22,200	40
45	32.5	17,400	17,500	44.5	17,800	17,900	45
50	21.0	13,900	14,200	38.0	14,300	14,600	50
55				30.0	11,700	12,100	55
60				19.0	9,500	10,000	60
Min.Bm. Ang/Cap.	0 (53.0)	10,500	10,500	0 (63.0)	7,600	7,600	Min.Bm. Ang/Cap.

Note: Refer To Page 5 For "Capacity Deductions For Audiliary Load Handling Equipment".

 $oldsymbol{lpha}$  Loaded Boom Angle In Degrees.

( ) Reference Radius For Minimum Boom Angle Capacities (Shown in Parenthesis) Are in Feet.

On Fully	filng Caps Extended Up Note 2	acities in d Outrigge	Pounds ers	#	FULL	#1	4,000#	h 0	MAIN BO	воом	
Load		110 Ft.			120 Ft.			127 Ft.		Load	
Radius (Ft.)	Δ°	360°	Over Rear	X°	360°	Over Rear	Δ°	360°	Over Rear	Radius (Ft.)	
25	76.0	29,400	29,400	77.5	23,300	23,300	78.0*	19,600	19,600	25	
30	73.5	26,200	26,200	75.0	23,300	23,300	76.0	19,600	19,600	30	
35	70.5	23,500	23,500	72.5	21,500	21,500	74.0	19,600	19,600	35	
40	68.0	21,200	21,200	70.0	19,400	19,400	71.5	18,400	18,400	40	
45	65.0	18,400	18,400	67.5	17,600	17,600	69.0	16,400	16,400	45	
50	61.5	14,900	15,200	65.0	15,000	15,300	66.5	14,900	14,900	50	
55	58.5	12,300	12,800	62.0	12,400	12,700	64.0	12,500	12,700	55	
60	55.0	10,200	10,700	59.0	10,300	10,600	61.5	10,300	10,800	60	
65	51.5	8,500	9,000	56.0	8,600	9,100	58.5	8,600	9,100	65	
70	48.0	7,100	7,600	53.0	7,100	7,700	55.5	7,200	7,700	70	
75	44.0	5,900	6,400	49.5	5,900	6,500	52.5	8,000	6,500	75	
60	40.0	4,800	5,400	46.0	4,900	5,500	49.5	4,900	5,500	60	
85	35.5	3,900	4,500	42.5	4,000	4,600	48.0	4,100	4,600	85	
90	30.5	3,200	3,700	38.5	3,200	3,800	43.0	3,300	3,800	. 90	
Min.Bm. Ang/ Cap.	26.0 (93.7)			34.0 (94.9)			39.0 (95.2)			Min.Bm. Ang/ Cap.	

Note: Refer To Page 5 For "Capacity Deductions For Auxiliary Load Handling Equipment".

🔏 Losded Boom Angle in Degrees.

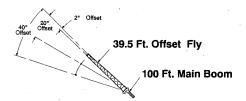
( ) Reference Radius For Minimum Boom Angle Capacities (Shown in Parenthesis) Are in Feet.

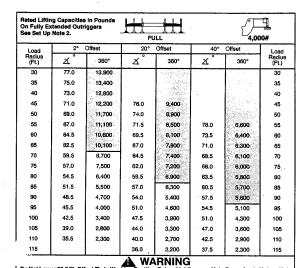
\* This capacity based on maximum obtainable boom angle.





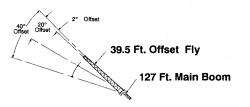
# Fully Extended Outriggers - Fly Capacities - Boom Mode "B" - 4,000 lb. Counterweight





Note: Refer To Page 5 For "Capacity Deductions For Auxiliary Load Handling Equipment".

∠ Loaded Boom Angle In Degrees.



r Fully Ext e Set Up I	Note 2.	_	FL			4,00	00#
Load	2°	Offset	20°	Offset	40°	Load	
Radius (Ft.)	Δ°	360°	۵°	360°	*	360°	Radiu (Ft.)
35	78.0*	8,300					35
40	76.5	8,300					40
45	75.0	8,300		1			45
50	73.5	8,300	78.0*	8,200			50
55	71.5	8,300	78.0	8,000		4.5	55
60	70.0	8,300	74.5	7,800			60
65	68.5	8,300	72.5	7,600	78.0	6,200	65
70	66.5	8,300	71.0	7,400	74.5	6,100	70
75	64.5	7,100	69.0	7,200	72.5	6,000	75
80	62.5	6,000	67.0	7,000	70.5	5,800	80
85	60.0	5,100	65.0	6,000	68.5	5,700	85
90	58.0	4,300	62.5	5,200	66.5	5,700	90
95	55.5	3,600	60.5	4,400	64.0	5,000	95
100	53.5	3,000	58.0	3,700	61.5	4,200	100
105	51.0	2,400	55.5	3,100	58.5	3,600	105
110			53.0	2,500	56.0	2,900	110
115		1		1	53.0	2,400	115

Do Not Lower 39.5 Ft. Offset Fly In Working Position Below 50 Degrees Main Boom Angle Unless Main Boom Length is 84 Ft. Or Less, Since Loss Of Stability Will Occur Causing A Tipping Condition.



\* This capacity based on maximum obtainable boom angle.

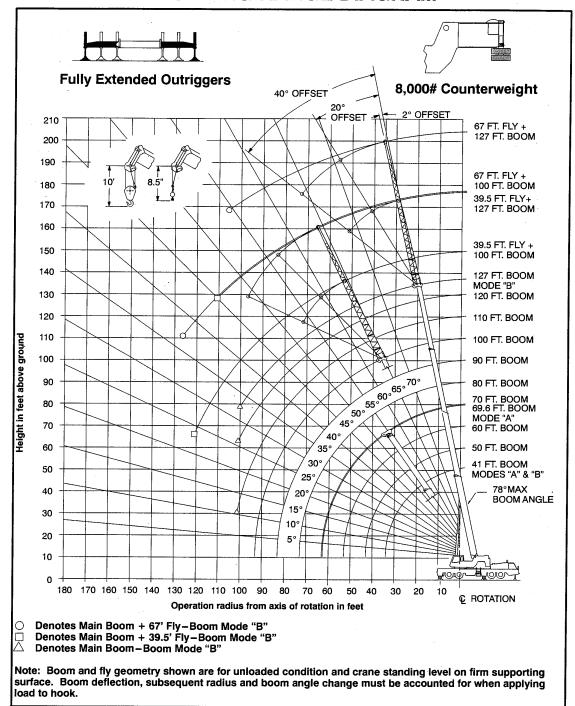








## **WORKING RANGE DIAGRAM**

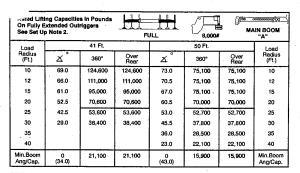


# WARNING

Do Not Lower The Boom Below The Minimum Boom Angle For No Load Stability As Shown In The Lift Charts For The Boom Lengths Given. Loss Of Stability Will Occur Causing A Tipping Condition.



#### Fully Extended Outriggers - Main Boom Capacities - 8,000 lb. Counterweight



Load		60 Ft.			69.6 Ft.		Load
Redius (Ft.)	x°	380°	Over Rear	x°	360°	Over Rear	Radius (Ft.)
10	76.5	74,000	74,000				10
12	74.5	74,000	74,000	78.5	43,900	43,900	12
15	71.5	74,000	74,000	74.5	43,900	43,900	15
20	66.0	69,500	69,500	70.0	43,900	43,900	20
25	60.5	51,900	51,900	65.5	43,900	43,900	25
30	54.5	37,200	37,200	60.5	36,700	36,700	30
35	48.5	28,000	28,000	55.5	27,600	27,600	35
40	41.0	21,800	21,800	50.0	21,500	21,500	40
45	32.5	17,200	17,200	44.5	17,000	17,000	45
50	21.0	13,700	13,700	37.5	13,400	13,500	50
55				29.5	10,700	10,900	55
60				18.5	8,400	8,700	60
Min.Boom Ang/Cap.	0 (53.0)	10,800	10,800	0 (62.6)	7,300	7,300	Min.Boom Ang/Cap.

Refer To Page 5 For "Capacity Deductions For Auxillary Load Handling Equipment". oaded Boom Angle in Degrees.

	xtended Ou	ss in Pounds triggers	FU	ILL	8,000#	<u> </u>	MAIN BOOM "B"	
Load		41 Ft.			50 Ft.		Load	
Radius. (Ft.)	Χ°	360°	Over Rear	x°	360°	Over Rear	Radius (Ft.)	
10	69.0	124,600	124,600	73.0	38,000	38,000	10	
12	66.0	111,000	111,000	70.5	38,000	38,000	12	
15	61.0	95,000	95,000	67.0	38,000	38,000	15	
20	52.5	70,600	70,600	60.5	38,000	38,000	20	
25	42.5	53,600	53,600	53.0	38,000	38,000	25	
30	29.0	38,400	38,400	45.0	38,000	38,000	30	
35				36.0	29,900	29,900	35	
40		l		23.0	23,500	23,500	40	
Min.Bm, Ang/Cap.	0 (34.0)	21,100	21,100	0 (43.0)	14,900	14,900	Min.Bm. Ang/Cap	

Load		60 Ft.			70 Ft.		Load
Radius (Ft.)	Δ°	360°	Over Rear	X,	360°	Over Rear	Radius (Ft.)
10	76.0	38,000	38,000				10
12	74.0	38,000	38,000	76.5	38,000	38,000	12
15	71.0	38,000	38,000	74.5	38,000	38,000	15
20	66.0	38,000	38,000	70.0	38,000	38,000	20
25	60.5	38,000	38,000	65.5	38,000	38,000	25
30	54.5	38,000	38,000	60.5	38,000	38,000	30
35	48.0	30,500	30,500	55.5	30,800	30,800	35
40	41.0	24,200	24,200	50.5	24,500	24,500	40
45	32.5	19,500	19,500	44.5	19,900	19,900	45
50	21.0	15,900	15,900	38.0	16,400	16,400	50
55				30.0	13,600	13,600	55
60				19.0	11,300	11,400	60
Min.Bm. Ang/Cap.	0 (53.0)	10,500	10,500	0 (63.0)	7,600	7,600	Min.Bm. Ang/Cap.

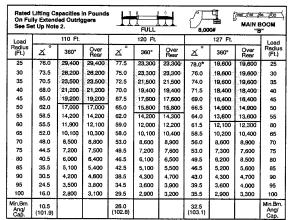
Note: Refer To Page 5 For "Capacity Deductions For Auxiliary Load Handling Equipment".

- ∠ Loaded Boom Angle in Degrees
- ( ) Reference Redius For Minimum Boom Angle Capacities (Shown in Parenthesis) Are in Feet.

On Ful		apacities i ded Outrig e 2.		<u> </u>	FULL			8,000# MAIN		
Load		80 Ft.			90 Ft.			100 Ft.		Load
Radius (Ft.)	¥°	360°	Over Rear	X°	360°	Over Rear	Χ°	360°	Over Rear	Redius (Ft.)
15	76.5	38,000	38,000		14.3550	8		\$182yet3	<b>Š</b> K # 3358	15
20	73.0	38,000	38,000	75.0	38,000	38,000	77.0	37,400	37,400	20
25	69.5	38,000	38,000	72.0	38,000	38,000	74.0	32,700	32,700	25
30	65.0	38,000	38,000	68.5	37,900	37,900	71.0	29,000	29,000	30
35	81.0	31,000	31,000	65.0	31,200	31,200	68.0	26,000	26,000	35
40	56.5	24,700	24,700	81.0	24,900	24,900	65.0	23,400	23,400	40
45	52.0	20,100	20,100	57.5	20,300	20,300	81.5	20,400	20,400	45
50	47.0	18,600	16,600	53.0	16,800	16,800	58.0	16,900	16,900	50
55	41.5	13,800	13,900	49.0	14,000	14,100	54.5	14,100	14,200	55
60	35.5	11,500	11,700	44.5	11,700	11,900	50.5	11,800	12,100	60
65	28.0	9,700	9,900	39.0	9,800	10,100	48.5	10,000	10,200	65
70	18.0	8,100	8,300	33.5	8,300	8,600	42.0	8,400	8,700	70
75		i		26.5	6,900	7,200	37.5	7,100	7,400	75
80				17.0	5,800	6,100	32.0	5,900	6,300	80
85					i		25.5	5,000	5,300	85
90							18.5	4,100	4,400	90
Min.Bm. Ang/ Cap.	0 (73.0)	5,500	5,500	0 (83.0)	3,900	3,900	0 (93.0)	2,700	2,700	Min.Bm. Ang/ Cap.

Note: Refer To Page 5 For "Capacity Deductions For Auxiliary Load Handling Equipment".

∠ Loaded Boom Angle in Degrees.



Note: Refer To Page 5 For "Capacity Deductions For Auxillary Load Hendling Equipment".

∠ Loaded Boom Angle In Degrees.

( ) Reference Radius For Minimum Boom Angle Capacities (Shown in Parenthesis) Are in Feet.

This capacity based on maximum obtainable boom angle.



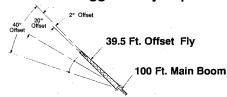


<sup>; ,</sup> Heference Radius For Minimum Boom Angle Capacities (Shown in Parenthesis) Are in Feet.

<sup>( )</sup> Reference Radius For Minimum Boom Angle Capacities (Shown in Parenthesis) Are in Feet.

#### Fully Extended Outriggers - Fly Capacities - Boom Mode "B" - 8,000 lb. Counterweight



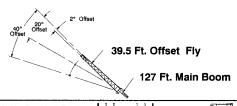


	ng Capacities xtended Outr Note 2.		FL				,000# %	
Load	2° (	Offset .	20° Offset		40°	Load <sup>0</sup>		
Radius (Ft.)	Δ°	360°	X°	360°	X°	360°	Redius (Ft.)	
30	77.0	13,900					30	
35	75.0	13,400					35	
40	73.0	12,800			1	İ	40	
45	71.0	12,200	76.0	9,400			45	
50	69.0	11,700	74.0	8,900			50	
.55	67.0	11,100	71.5	8,500	76.0	6,600	55	
60	64.5	10,600	69.5	8,100	73.5	6,400	60	
65	62.5	10,100	67.0	7,800	71.0	6,300	65	
70	60.0	9,700	64.5	7,400	68.5	6,100	70 .	
75	57.5	8,800	82.0	7,200	66.0	8,000	75	
60	54.5	7,600	59.5	6,900	63.5	5,800	80	
- 85	52.0	6,600	57.0	6,600	60.5	5,700	85	
90	49.0	5,700	54.0	6,400	57.5	5,600	90	
95	46.0	5,000	51.0	5,600	54.5	5,500	95	
100	42.5	4,300	48.0	4,900	51.0	5,200	100	
105	39.5	3,700	44.5	4,200	47.5	4,500	105	
110	35.5	3,100	40.5	3,600	43.0	3,800	110	
115	31.5	2,700	36.5	3,000			115	
120	27.0	2,200	31.5	2,500			120	
125			25.5	2,000			125	

Do Not Lower 39.5 Ft. Offset Fly In Working Position Below 23.5 Degrees Main Boom Angle Unless Ma

Note: Refer To Page 5 For "Capacity Deductions For Auxiliary Load Handling Equipment".





	ing Capacitie Extended Out p Note 2.			FULL	8,000#			
Load	2° (	Offset	20°	Offset	40°	Offset	Load	
Radius (Ft.)	Δ°	360°	×°	360°	×°	360°	Radius (Ft.)	
35	78.0*	8,300					35	
40	76.5	8,300					40	
45	75.0	8,300				l	45	
50	73.5	8,300	78.0*	8,200	Ì		50	
55	71.5	8,300	78.0	8,000			55	
60	70.0	8,300	74.5	7,800			60	
65	68.5	8,300	72.5	7,600	76.0	6,200	65	
70	67.0	8,300	71.0	7,400	.74.5	6,100	. 70	
75	65.0	7,800	69.0	7,200	72.5	6,000	75	
80	63.0	7,100	67.0	7,000	70.5	5,800	80	
85	60.5	6,200	65.5	6,800	68.5	5,700	85	
90	58.5	5,400	63.0	6,200	66.5	5,700	90	
95	56.0	4,600	60.5	5,400	64.0	5,600	95	
100	53.5	3,900	58.5	4,600	62.0	5,200 14	100	
¹-105	51.5	3,300	56.0	4,000	59.0	4,400	105	
110	49.0	2,800	53.5	3,400	56.5	3,800	110	
115	46.0	2,300	50.5	2,800	53.5	3,200	115	
120			48.0	2,300	50.5	2,600	120	
125					47.5	2,100	125	

DO NOT LOWER 39.5 Ft. Offset Fly In Working Position Below 45 Degrees Main Boom Angle Unless Mai

Note: Refer To Page 5 For "Capacity Deductions For Auxillary Load Handling Equipment".

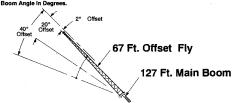


	xtended Out	s in Pounds riggers	F	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	8,000#			
Load		2° Offset		Offset	40°	Load		
Radius (Ft.)	x°.	360°	X°	360°	x°	360°	Radius (Ft.)	
40	77.0	8,300				1	40	
45	75.5	7,900					45	
50	73.5	7,500					50	
55	72.0	7,100					55	
60	70.0	6,600	77.0	4,700		1	60	
65	68.5	6,200	75.5	4,500		1	65	
70	66.5	5,800	73.5	4,200			70	
75	64.5	5,500	71.5	4,000			75	
80	62.5	5,200	69.5	3,900	76.0	3,000	80	
85	60.5	4,900	67.5	3,700	74.0	3,000	85	
90	58.5	4,600	65.5	3,500	72.0	2,900	90	
95	56.5	4,400	63.5	3,400	69.5	2,800	95	
100	54.5	4,200	61.5	3,300	67.5	2,700	100	
105 ~~	52.0	3,900	59.0	3,200	65.0	2,700	105	
110	50.0	3,800	57.0	3,100	62.5	2,600	110	
115	47.5	3,400	54.5	3,000	60.0	2,600	115	
120	44.5	2,900	52.0	2,900	57.0	2,500	120	
125	42.0	2,500	49.0	2,800	54.0	2,500	125	
130	39.0	2,100	46.5	2,700	50.5	2,500	130	
135			43.0	2,300	47.0	2,500	135	
140			39.5	1,900	42.5	2,100	140	

Do Not Lower 67 Ft. Offset Fly In Working Position Below 37 Degrees Main Boom Angle Unless Main Boom Length is 88 Ft. Or Less, Since Loss of Stability Will Gour Causing A Tipping Condition.

Note: Refer To Page 5 For (Capacity Deductions For Audiliary Load Handling Equipment".

 $oldsymbol{arNotation}$  Loaded Boom Angle In Degrees.



e Set Up N	ended Outri lote 2.	-	FU			€/ <sub>8,000</sub>	#
Load		Offset	20°	Offset	40°	Offset	Load
Radius (Ft.)	¥°	360°	×°	360°	x°	360°	Radius (Ft.)
50	78.5	5,500					50
55	75.5	5,500					55
60	74.0	5,500				ŀ	60
65	73.0	5,500					65
70	71.5	5,500	77.5	4,200			70
75	70.0	5,300	76.0	4,000			75
80	68.5	5,100	74.5	3,900			80
85	67.0	4,900	73.0	3,800			85
90	65.5	4,800	71.5	3,600	77.0	2,900	90
95	64.0	4,600	70.0	3,500	75.0	2,800	95
100	62.0	4,300	68.0	3,400	73.5	2,800	100
105	60.5	3,900	66.5	3,300	71.5	2,700	105
110	58.5	3,400	64.5	3,200	70.0	2,600	110
115	56.5	2,900	63.0	3,100	68.0	2,600	115
120			61.0	3,000	66.0	2,600	120
125			59.0	2,600	64.0	2,500	125
130			57.0	2,400	81.5	2,500	130
135					59.5	2,500	135
140		1		l	57.0	2,000	140

Do Not Lower 67 Ft. Offset Fly in Working Position Below 54.5 Degrees Main Boom Angle Unless Mein Boom Length is 98 Ft. Or Less, Since Loss Of Stability Will Occur Causing A Tipping Condition.

Note: | Refer To Page 5 For "Capacity Deductions For Auxiliary Load Handling Equipment".

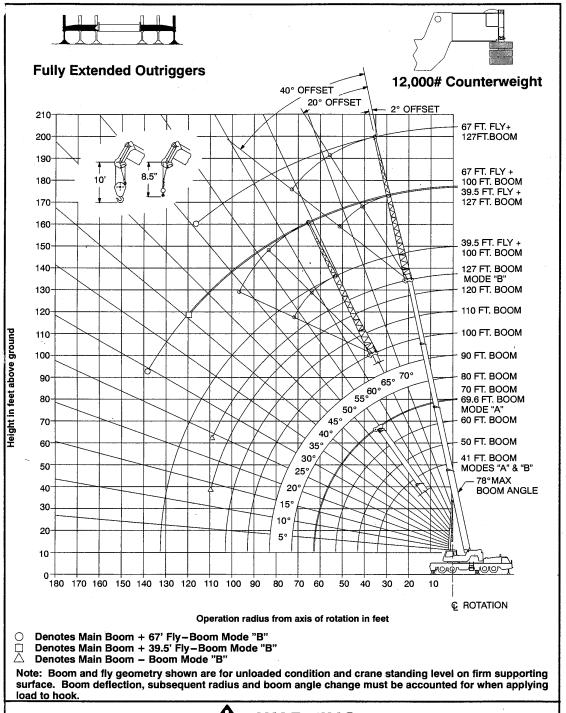
<sup>🔏</sup> Loaded Boom Angle in Degrees.

<sup>\*</sup> This capacity based on maximum obtainable boom angle.

<sup>∠</sup> Loaded Boom Angle In Degrees.



# **WORKING RANGE DIAGRAM**





### WARNING

Do Not Lower The Boom Below The Minimum Boom Angle For No Load Stability As Shown In The Lift Charts For The Boom Lengths Given. Loss Of Stability Will Occur Causing A Tipping Condition.



#### Fully Extended Outriggers - Main Boom Capacities - 12,000 lb. Counterweight



On Fully E See Set Up	xtended Ou Note 2.	triggers	- LAA-F	ULL	12,000#		MIN BOOM "A"
Load		41 Ft.			50 Ft.	Load	
Radius (Ft.)	∡°	360°	Over Rear	X°	360°	Over Rear	Radius (Ft.)
9	70.5	140,000	140,000				9
10	69.0	127,500	127,500	73.0	75,100	75,100	10
12	66.0	113,800	113,600	70.5	75,100	75,100	12
15	61.0	97,300	97,300	67.0	75,100	75,100	15
20	52.5	73,100	73,100	60.5	72,500	72,500	20
25	42.5	56,100	58,100	53.0	55,600	55,600	25
30	29.0	41,900	41,900	45.5	41,300	41,300	30
35				36.0	31,300	31,300	35
40				23.0	24,500	24,500	40
Min.Boom Ang/Cap.	0 (34.0)	21,100	21,100	0 (43.0)	15,900	15,900	Min.Boom Ang/Cap.

Load		60 Ft.	÷		69.6 Ft.		Load
Radius (Ft.)	Δ°	360°	Over Rear	Δ°	360°	Over Rear	Radius (Ft.)
10	76.5	74,000	74,000				10
12	74.5	74,000	74,000	76.5	43,900	43,900	12
15	71.5	74,000	74,000	74.5	43,900	43,900	15
. 20	66.0	72,000	72,000	70.0	43,900	43,900	20
25	60.5	55,200	55,200	65.5	43,900	43,900	25
30	54.5	40,600	40,600	81.0	37,900	37,900	30
35	48.5	30,800	30,800	55.5	30,400	30,400	35
40	41.0	24,200	24,200	50.5	23,800	23,800	40
45	32.5	19,300	19,300	44.5	19,000	19,000	45
50	21.0	15,500	15,500	37.5	15,300	15,300	50
55			·	29.5	12,500	12,500	55
60				18.5	10,100	10,100	60
Min.Boom Ang/Cap.	0 (53.0)	10,800	10,800	0 (62.6)	7,300	7,300	Min.Boom Ang/Cap.

Note: Refer To Page 5 For "Capacity Deductions For Auxiliary Load Handling Equipment".  $\Delta$  Loaded Boom Angle in Degrees.

( ) Reference Radius For Minimum Boom Angle Capacities (Shown in Parenthesia) Are in Feet.

On Fu	Lifting Co lly Extend at Up Note	apacities ied Outric e 2.	in Pounda igers	<b>'</b>	FULL			<b>1</b> 0	MAIN BOOM "B"	
Load		80 Ft.			90 Ft.			100 Ft.		
Radius (Ft.)	Δ°	360°	Over Rear	X°	360°	Over Rear	Δ°	360°	Over Rear	Radius (Ft.)
15	76.5	38,000	38,000	1				1	:	15
20	73.0	38,000	38,000	75.0	38,000	38,000	77.0	37,400	37,400	20
25	69.5	38,000	38,000	72.0	38,000	38,000	74.0	32,700	32,700	25
30	65.0	38,000	38,000	68.5	37,900	37,900	71.0	29,000	29,000	30
35	61.0	33,800	33,800	65.0	33,900	33,900	68.0	26,000	26,000	35
40	56.5	27,000	27,000	61.5	27,200	27,200	65.0	23,400	23,400	40
45	52.0	22,200	22,200	57.5	22,300	22,300	61.5	21,200	21,200	45
50	47.0	18,400	18,400	53.5	18,600	18,600	58.0	18,700	18,700	50
55	41.5	15,500	15,500	49.0	15,600	15,600	54.5	15,800	15,800	55
60	35.5	13,100	13,100	44.5	13,300	13,300	50.5	13,400	13,400	60
65	28.0	11,200	11,200	39.5	11,400	11,400	48.5	11,500	11,800	65
70	18.0	9,500	9,500	33.5	9,700	9,800	42.0	9,800	9,900	70
75		1		26.5	8,300	8,400	37.5	8,400	8,500	75
80				17.0	7,000	7,100	32.0	7,200	7,300	80
85					1		25.5	6,100	6,300	85
90							16.5	5,200	5,300	90
Min.Bm. Ang/ Cap.	0 (73.0)	5,500	5,500	0 (83.0)	3,900	3,900	0 (93.0)	2,700	2,700	Min.Bm. Ang/ Cap.

Note: Refer To Page 5 For "Capacity Deductions For Auxiliary Load Handling Equipment".

 $oldsymbol{arNotation}$  Loaded Boom Angle in Degrees.

( ) Reference Radius For Minimum Boom Angle Capacities (Shown in Parenthesia) Are in Feet.

	Extended Ou		H	TULL	12,000#	M.	
Load		41 Ft.			50 Ft.		Load
Radius (Ft.)	X °	360°	Over Rear	X °	360°	Over Rear	Radius (Ft.)
9	70.5	140,000	140,000				- 9
10	69.0	127,500	127,500	73.0	38,000	38,000	10
12	66.0	113,600	113,600	70.5	38,000	38,000	12
15	61.0	97,300	97,300	67.0	38,000	38,000	15
20	52.5	73,100	73,100	60.5	38,000	38,000	20
25	42.5	56,100	56,100	53.0	38,000	38,000	25
30	29.0	41,900	41,900	45.5	38,000	38,000	30
35				36.0	32,800	32,800	35
40				23.0	25,800	25,800	40
Min.Bm. Ang/Cap.	0 (34.0)	21,100	21,100	0 (43.0)	14,900	14,900	Min.Bm. Ang/Cap.
Load	T	60 Ft.			70 Ft.		Load
Radius (Ft.)	Δ°	360°	Over Rear	Δů	360°	Over Rear	Radius (Ft.)
10	76.0	38,000	38,000				10
12	74.0	38,000	38,000	78.5	38,000	38,000	12
15	71.0	38,000	38,000	74.5	38,000	38,000	15
20	68.0	38,000	38,000	70.0	38,000	38,000	20
25	60.5	38,000	38,000	65.5	38,000	38,000	25
30	54.5	38,000	38,000	60.5	38,000	38,000	30
. 35	48.0	33,300	33,300	55.5	33,600	33,600	35
40	41.0	26,500	26,500	50.5	28,800	28,800	40
45	32.5	21,500	21,500	44.5	21,900	21,900	45.
50	21.0	17,700	17,700	38.0	18,200	18,200	50
55				30.0	15,200	15,200	55
60		·		19.5	12,800	12,800	60
Min.Bm. Ang/Cap.	0 (53.0)	10,500	10,500	0 (63.0)	7,600	7,600	Min.Bm. Ang/Cap.

∠ Loaded Boom Angle (n Degrees.

( ) Reference Radius For Minimum Boom Angle Capacities (Shown in Parenthesis) Are in Feet.

Ол Fu		ipacities i led Outrig 2.		, <u>F</u>	FULL 120 Ft.			] •	MAIN BOOM "B"		
Load		110 Ft.			120 Ft.			127 Ft.		Load	
Radius (Ft.)	Χ°	360°	Over Rear	Δ°	360°	Over Rear	Z.	360°	Over Rear	Radius (Ft.)	
25	76.0	29,400	29,400	77.5	23,300	23,300	78.0*	19,600	19,600	25	
30	73.5	28,200	26,200	75.0	23,300	23,300	76.0	19,600	19,600	30	
35	70.5	23,500	23,500	72.5	21,500	21,500	74.0	19,600	19,600	35	
40	68.0	21,200	21,200	70.0	19,400	19,400	71.5	18,400	18,400	40	
45	65.0	19,200	19,200	67.5	17,600	17,600	69.0	16,400	18,400	45	
50	62.0	17,400	17,400	65.0	15,600	15,800	66.5	14,900	14,900	50	
55	59.0	15,800	15,800	62.0	14,400	14,400	64.0	13,600	13,600	55	
60	55.5	13,5Q0	13,500	59.5	13,200	13,200	61.5	12,500	12,500	60	
65	52.0	11,600	11,600	58.5	11,700	11,700	59.0	11,500	11,500	65	
70	48.5	9,900	10,000	53.0	10,000	10,100	56.0	10,000	10,100	70	
75	44.5	8,500	8,600	50.0	8,600	8,700	53.0	8,600	8,800	75	
80	40.5	7,300	7,500	48.5	7,300	7,500	50.0	7,400	7,600	80	
85	36.0	6,200	6,400	43.0	6,300	6,500	46.5	6,300	8,500	85	
90	30.5	5,300	5,500	39.0	5,400	5,600	43.0	5,400	5,600	90	
95	24.5	4,500	4,700	34.5	4,600	4,800	39.5	4,600	4,600	95	
100	16.0	3,700	3,900	29.5	3,800	4,100	35.5	3,900	4,100	100	
105				23.5	3,200	3,400	31.0	3,200	3,500	105	
110				15.5	2,600	2,800	25.5	2,700	2,900	110	
Min.Bm. Ang/ Cap.	0 (103.0)	1,700	1,700	13.5 (110.9)			24.0 (111.2)			Min.Bm. Ang/ Cap.	

Note: Refer To Page 5 For "Capacity Deductions For Auxiliary Load Handling Equipment".

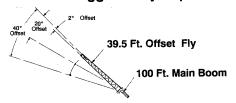
 $oldsymbol{arNotation}$  Loaded Boom Angle in Degrees.

Reference Radius For Minimum Boom Angle Capacities (Shown in Parenthesis) Are in Feet.
 This capacity based on maximum obtainable boom angle.





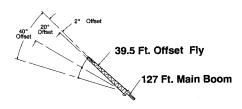
# Fully Extended Outriggers - Fly Capacities - Boom Mode "B" - 12,000 lb. Counterweight



Rated Liftin On Fully Ex See Set Up	ctended Ou	es in Pounds itriggers	1	FULL		12,0	100#
Load	2°	Offset	20°	Offset	40°	Offset	Load
Radius (Ft.)	Δ°	360°	×°	360°	ă°	360°	Radius (Ft.)
30	77.0	13,900				177	30
35	75.0	13,400		7			35
40	73.0	12,800		148 34.1		1 3 3 3 3	40
45	71.0	12,200	76.0	9,400			45
50	69.0	11,700	74.0	8,900		F (2.6)	50
55	67.0	11,100	71.5	8,500	76.0	6,600	55
60	64.5	10,800	69.5	8,100	73.5	6,400	60
65	62.5	10,100	67.0	7,800	71.0	6,300	65
70	60.0	9,700	64.5	7,400	68.5	6,100	70
75	57.5	9,200	62.0	7,200	68.0	6,000	75
60	55.0	6,700	59.5	6,900	63.5	5,800	60
85	52.0	7,800	57.0	6,600	60.5	5,700	85
90	49.5	6,600	54.0	6,400	57.5	5,600	90
95	46.0	6,000	51.5	6,200	54.5	5,500	95
100	43.0	5,200	48.0	5,800	51.5	5,500	100
105	39.5	4,600	44.5	5,100	47.5	5,400	105
110	36.0	4,000	41.0	4,400	43.5	4,600	110
115	32.0	3,500	36.5	3,800	38.5	4,000	115
120	27.5	3,000	31.5	3,300		1	120
125	21.5	2,600	25.5	2,700		1	125
130	14.0	2,200					130
Min.Boom Ang/Cap.	0	600	0	600	0	700	Min.Boon Ang/Cap

e: Refer To Page 5 For "Capacity Deductions For Auxiliary Load Handling Equipment".





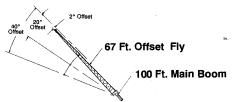
	extended Out	es in Pounds riggers	1	FULL		12,0	9 60#	
Load	2° (	Offset	20°	Offset	40°	40° Offset		
Radius (Ft.)	X°	360°	×°	360°	ă.	360°	Radius (Ft.)	
35	78.0*	8,300		10.25			35	
40	76.5	8,300				명성하는 것	40	
45	75.0	8,300		1,325			45	
50	73.5	8,300	78.0*	8,200		081113	50	
55	71.5	8,300	76.0	8,000		2000	55	
60	70.0	8,300	74.5	7,800		110	60	
65	68.5	8,300	72.5	7,600	76.0	6,200	65	
70	67.0	8,300	71.0	7,400	74.5	6,100	70	
75	65.0	7,800	69.0	7,200	72.5	6,000	75	
80	63.0	7,100	67.0	7,000	70.5	5,800	60	
85	60.5	6,600	65.5	6,800	68.5	5,700	85	
90	58.5	6,000	63.0	6,300	66.5	5,700	90	
95	56.5	5,600	61.0	5,800	64.0	5,600	95	
100	54.0	4,900	58.5	5,300	62.0	5,500	100	
105	51.5	4,200	56.5	4,900	59.5	5,100	105	
110	49.0	3,600	53.5	4,200	57.0	4,600	110	
115	46.5	3,100	51.0	3,600	54.0	4,000	115	
120	44.0	2,600	48.0	3,100	51.0	3,400	120	
125	1		45.5	2,600	46.0	2,900	125	
130	l	l	42.0	2,200	44.5	2,400	130	

DO NOT LOWER 39,5 Ft. Offset Fly In Working Position Below 40,5 Degrees Mein Boom Angle Unless Mei Boom Length is 100 Ft. Of Less. Sings Loss Of Shability Will Occur Causing A Tipping Condition.

Note: Refer To Page 5 For "Capacity Deductions For Auxiliary Load Handling Equipment"

∠ Loaded Boom Angle in Degrees.

\* This capacity based on maximum obtainable boom angle.



	xtended Ou	es in Pounds triggers	$\mathbb{H}$	FULL	12,000#			
Load	2° (	Offset	20°	Offset	40°	Offset	Load	
Radius (Ft.)	×°	360°	Χ°	360°	X°.	360°	Radius (Ft.)	
40	77.0	8,300					40	
45	75.5	7,900					45	
50	73.5	7,500		1		}	50	
55	72.0	7,100		1 1		İ	55	
60	70.0	6,600	77.0	4,700		1	60	
65	68.5	6,200	75.5	4,500			65	
70	66.5	5,800	73.5	4,200			70	
75	64.5	5,500	71.5	4,000			75	
80	62.5	5,200	69.5	3,900	76.0	3,000	80	
85	60.5	4,900	67.5	3,700	74.0	3,000	85	
90	56.5	4,600	85.5	3,500	72.0	2,900	90	
95	56.5	4,400	63.5	3,400	69.5	2,800	95	
100	54.5	4,200	61.5	3,300	67.5	2,700	100	
105	52.0	3,900	59.0	3,200	65.0	2,700	105	
110	50.0	3,800	57.0	3,100	62.5	2,600	110	
115	47.5	3,600	54.5	3,000	60.0	2,600	115	
120	45.0	3,400	52.0	2,900	57.0	2,500	120	
125	42.5	3,200	49.0	2,800	54.0	2,500	125	
130	39.5	2,600	46.5	2,700	50.5	2,500	130	
135	36.0	2,400	43.0	2,600	47.0	2,500	135	
140	33.0	2,100	39.5	2,500	42.5	2,500	140	
145		1	35.5	2,100			145	
150			30.5	1,600			150	

WARNING

Do Not Lower 67 Ft. Offset Fly in Working Position Below 29.5 Degrees Main Boom Angle Unless Main Boom Length is 92 Ft. Or Less, Since Loss Of Stability Will Occur Causing A Tipping Condition.

Note: Refer To Page 5 For "Capacity Deductions For Auxillary Load Handling Equipment".

∠ Loaded Boom Angle in Degrees.



	ng Capacitie xtended Out Note 2.		#	FULL		12,0	100#
Load	2° (	Offset	20°	Offset	40°	Offset	Load
Radius (Ft.)	¥°	360°	∡°	360°	Δ°	360°	Radius (Ft.)
50	76.5	5,500					50
55	75.5	5,500		1.			55
60	74.0	5,500					60
65	73.0	5,500		1 1			65
70	71.5	5,500	77.5	4,200			70
75	70.0	5,300	76.0	4,000			75
80	68.5	5,100	74.5	3,900			80
85	67.0	4,900	73.0	3,800			85
90	65.5	4,600	71.5	3,600	77.0	2,900	90
95	64.0	4,600	70.0	3,500	75.0	2,800	95
100	62.0	4,300	68.0	3,400	73.5	2,800	100
105	60.5	3,900	66.5	3,300	71.5	2,700	105
110	58.5	3,600	64.5	3,200	70.0	2,600	110
115	56.5	3,200	63.0	3,100	68.0	2,600	115
120	54.5	2,900	61.0	3,000	66.0	2,600	120
125	52.5	2,700	59.0	2,900	64.0	2,500	125
130			57.0	2,600	61.5	2,500	130
135			54.5	2,300	59.5	2,500	135
140			52.5	2,100	57.0	2,300	140
145		1 1			54.5	2,000	145
150		1		1	51.5	1,800	150

Do Not Lower 67 Ft Offset Fly in Working Position Relow 50.5 Degrees Main Boom Angle Unless Main

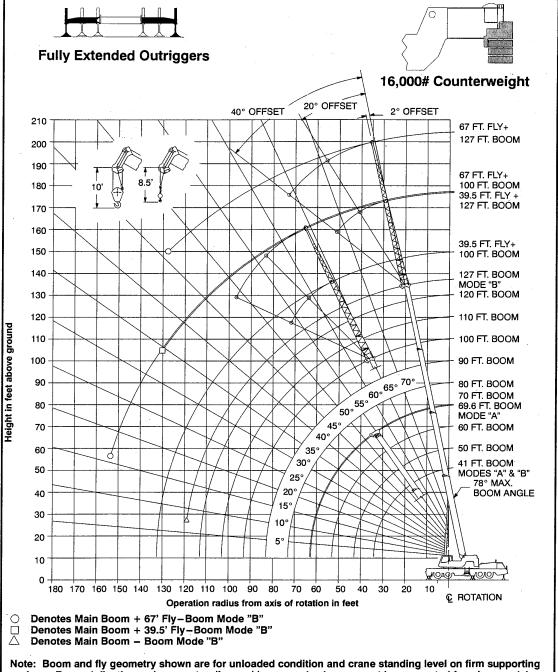
Note: Refer To Page 5 For "Capacity Deductions For Auxiliary Load Handling Equipment".  $\angle$  Loaded Boom Angle in Degrees.







# **WORKING RANGE DIAGRAM**



Note: Boom and fly geometry shown are for unloaded condition and crane standing level on firm supporting surface. Boom deflection, subsequent radius and boom angle change must be accounted for when applying load to hook.

# A

#### WARNING

Do Not Lower The Boom Below The Minimum Boom Angle For No Load Stability As Shown In The Lift Charts For The Boom Lengths Given. Loss Of Stability Will Occur Causing A Tipping Condition.



# Fully Extended Outriggers - Main Boom Capacities - 16,000 lb. Counterweight

lated Lifting on Fully Extends see Set Up N	Capacities ended Outri lote 2.	in Pounds ggers	FUL		16,000#	(S	N BOOM "A"
Load		41 Ft.			50 Ft.		Load
Radius (Ft.)	∡°	360°	Over Rear	Χ°	360°	Over Rear	Radius (Ft.)
9	70.5	140,000	140,000				9
10	69.0	128,600	128,600	73.0	75,100	75,100	10
12	66.0	116,000	116,000	70.5	75,100	75,100	12
15	61.0	99,400	99,400	67.0	75,100	75,100	15
20	52.5	75,300	75,300	60.5	74,700	74,700	20
25	42.5	58,100	58,100	53.5	57,600	57,600	25
30	29.0	45,300	45,300	45.5	44,700	44,700	30
35				36.0	34,100	34,100	35
40				23.0	26,800	26,800	40
Min.Boom Ang/Cap.	0 (34.0)	21,100	21,100	0 (43.0)	15,900	15,900	Min.Boom Ang/Cap.

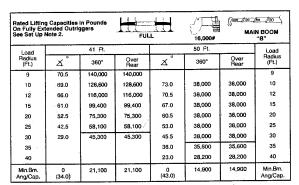
Load		60 Ft.			69.6 Ft.		Load
Radius (Ft.)	x°	360°	Over Rear	×°	360°	Over Rear	Radius (Ft.)
10	76.5	74,000	74,000				10
12	74.5	74,000	74,000	76.5	43,900	43,900	12
15	71.5	74,000	74,000	74.5	43,900	43,900	15
20	66.0	74,000	74,000	70.0	43,900	43,900	20
25	60.5	57,200	57,200	65.5	43,900	43,900	25
30	55.0	44,100	44,100	61.0	37,900	37,900	30
35	48.5	33,600	33,600	56.0	33,200	33,200	35
40	41.0	26,500	26,500	50.5	26,100	26,100	40
45	32.5	21,300	21,300	44.5	21,000	21,000	45
50	21.0	17,300	17,300	37.5	17,100	17,100	50
55				29.5	14,000	14,000	55
60				18.5	11,500	11,500	80
Min.Boom	0 (53.0)	10,800	10,800	0 (62.6)	7,300	7,300	Min.Boom Ang/Cap.

<sup>..</sup>તાફુ: Refer To Page 5 For "Capacity Deductions For Auxillary Load Handling Equipment".

<sup>( )</sup> Reference Radius For Minimum Boom Angle Capacities (Shown in Parenthesis) Are in Feet.

On Fully		scities in d Outrigge 			FULL	Ħ	16,000			
Load		80 Ft.		90 Ft.				100 Ft.		Load
Radius (Ft.)	Δ°	360°	Over Rear	X°	360°	Over Rear	×°	360°	Over Rear	Radius (Ft.)
15	76.5	38,000	38,000							15
20	73.0	38,000	38,000	75.0	38,000	38,000	77.0	37,400	37,400	20
25	69.5	38,000	38,000	72.0	38,000	38,000	74.0	32,700	32,700	25
30	65.5	38,000	38,000	68.5	37,900	37,900	71.0	29,000	29,000	30
35	61.0	36,600	36,600	65.0	33,900	33,900	68.0	26,000	26,000	35
40	56.5	29,400	29,400	61.5	29,500	29,500	85.0	23,400	23,400	40
45	52.0	24,200	24,200	57.5	24,300	24,300	61.5	21,200	21,200	45
50	47.0	20,200	20,200	53.5	20,400	20,400	58.0	19,300	19,300	50
55	41.5	17,100	17,100	49.0	17,200	17,200	54.5	17,300	17,300	55
60	35.5	14,500	14,500	44.5	14,700	14,700	50.5	14,800	14,800	60
65	28.0	12,500	12,500	39.5	12,700	12,700	46.5	12,800	12,800	65
70	18.0	10,700	10,700	33.5	11,000	11,000	42.5	11,100	11,100	70
75				27.0	9,500	9,500	37.5	9,600	9,600	75
80				17.5	8,200	8,200	32.0	8,400	8,400	80,
85		l					25.5	7,200	7,200	85
90						l	16.5	6,200	6,300	90
Min.Bm. Ang/ Cap.	0 (73.0)	5,500	5,500	0 (83.0)	3,900	3,900	0 (93.0)	2,700	2,700	Min.Br Ang Cap

Note: Refer To Page 5 For "Capacity Deductions For Auxiliary Load Handling Equipment".



Load		60 Ft.			70 Ft.		Load
Radius (Ft.)	Δ°	360°	Over Rear	X °	360°	Over Rear	Radius (Ft.)
10	76.0	38,000	38,000				10
12	74.0	38,000	38,000	76.5	38,000	38,000	12
15	71.0	38,000	38,000	74.5	38,000	38,000	15
20	66.0	38,000	38,000	70.0	38,000	38,000	20
25	60.5	38,000	38,000	65.5	38,000	38,000	25
30	54.5	38,000	38,000	61.0	38,000	38,000	30
35	48.0	36,100	36,100	55.5	36,400	36,400	35
40	41.0	28,900	28,900	50.5	29,200	29,200	40
45	32.5	23,600	23,600	44.5	24,000	24,000	45
50	21.0	19,500	19,500	38.0	20,000	20,000	50
55		1		30.0	16,800	16,800	55
60				19.5	14,200	14,200	60
Min.Bm. Ang/Cap.	0 (53.0)	10,500	10,500	0 (63.0)	7,600	7,600	Min.Bm. Ang/Cap.

Note: Refer To Page 5 For "Capacity Deductions For Auxiliary Load Handling Equipment".

<sup>( )</sup> Reference Radius For Minimum Boom Angle Capacities (Shown in Parenthesis) Are in Feet.

On Fully	iting Capa Extended Up Note 2	i Outrigge	Pounds	H	FULL	H	16,0004		/∞ /∞ MAIN B "B'	
Load		110 Ft.			120 Ft.			127 Ft.		Load
Radius (Ft.)	۲°	360°	Over Rear	x°	360°	Over Rear	Δ°	360°	Over Rear	Radius (Ft.)
25	76.0	29,400	29,400	77.5	23,300	23,300	78.0*	19,600	19,600	25
30	73.5	26,200	26,200	75.0	23,300	23,300	76.0	19,600	19,600	30
35	70.5	23,500	23,500	72.5	21,500	21,500	74.0	19,600	19,600	35
40	68.0	21,200	21,200	70.0	19,400	19,400	71.5	18,400	18,400	40
45	65.0	19,200	19,200	67.5	17,600	17,600	69.0	16,400	16,400	45
50	62.0	17,400	17,400	65.0	15,800	15,800	66.5	14,900	14,900	50
55	59.0	15,800	15,800	62.0	14,400	14,400	64.0	13,600	13,600	55
60	55.5	14,500	14,500	59.5	13,200	13,200	61.5	12,500	12,500	60
65	52.0	12,800	12,800	56.5	12,200	12,200	59.0	11,500	11,500	65
70	48.5	11,200	11,200	53.5	11,200	11,200	56.0	10,600	10,600	70
75	44.5	9,800	9.800	50.0	9,800	9,800	53.5	9,700	9,700	75
80	40.5	8,500	8,500	46.5	8,600	8,600	50.0	8,600	8,600	80
85	36.0	7,300	7,400	43.0	7,400	7,500	47.0	7,500	7,500	85
90	31.0	8,400	6,400	39.0	6,400	6,500	43.5	6,500	6,600	90
95	24.5	5,500	5,500	34.5	5,600	5,600	39.5	5,600	5,700	95
100	16.0	4,700	4,800	30.0	4,800	4,900	35.5	4,800	4,900	100
105				24.0	4,100	4,200	31.0	4,100	4,200	105
110				15.5	3,500	3,600	26.0	3,500	3,600	110
115				1			19.0	2,900	3,100	115
Min.Bm. Ang/ Can	0 (103.0)	1,700	1,700	0 (113.0)	900	900	7.5 (119.6)			Min.Bm. Ang/ Cap.

Note: Refer To Page 5 For "Capacity Deductions For Auxiliary Load Handling Equipment".





<sup>🔏</sup> Loaded Boom Angle in Degrees.

X Loaded Boom Angle In Degrees.

Reference Radius For Minimum Boom Angle Capacities (Shown in Psrenthesis) Are in Feet.

<sup>∠</sup> Loaded Boom Angle in Degrees.

<sup>🔏</sup> Loaded Boom Angle in Degrees.

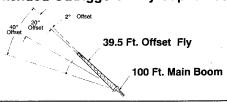
<sup>( )</sup> Reference Radius For Minimum Boom Angle Capacities (Shown in Parenthesis) Are in Feet.

This capacity based on maximum obtainable boom angle.



# Fully Extended Outriggers - Fly Capacities - Boom Mode "B" - 16,000 lb. Counterweight

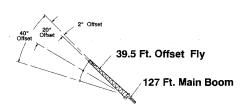




	g Capacities tended Outri Note 2.		1	FULL	1	16,00	
Load	2° (	Offset	20°	Offset	40°	Offset	Load Radius
Radius (Ft.)	X°	360°	Χ°	360°	X°		
30	77.0	13,900					30
35	75.0	13,400		l	į.		35
40	73.0	12,800		1	ŀ		40
45	71.0	12,200	76.0	9,400	ľ		45
50	69.0	11,700	74.0	8,900			50
55	67.0	11,100	71.5	8,500	76.0	6,800	55
60	64.5	10,600	69.5	8,100	73.5	8,400	60
65	62.5	10,100	67.0	7,800	71.0	6,300	65
70	60.0	9,700	64.5	7,400	68.5	6,100	70
75	57.5	9,200	62.0	7,200	66.0	6,000	75
80	55.0	8,700	59.5	6,900	63.5	5,800	80
85	52.5	8,300	57.0	6,600	60.5	5,700	85
90	49.5	7,900	54.0	6,400	57.5	5,600	90
95	46.5	7,000	51.5	6,200	54.5	5,500	95
100	43.5	6,200	48.0	6,000	51.5	5,500	100
105	40.0	5,500	45.0	5,900	47.5	5,400	105
110	36.0	4,800	41.0	5,300	43.5	5,400	110
115	32.0	4,300	37.0	4,800	38.5	4,800	115
. 120	27.5	3,800	32.0	4,000	l	l	120
125	22.0	3,300	26.0	3,500	i	1	125
130	14.0	2,900			1		130
Min.Boom Ang/Cap.	0	600	0	600	0	700	Min.Boom Ang/Cap.

Note: Refer To Page 5 For "Capacity Deductions For Audiliary Load Handling Equipment".

<sup>🔏</sup> Lóaded Boom Angle in Degrees.



			F	ULL		16,000#			
Load		Offset	20° Offset		40°	Offset	Load		
Radius (Ft.)	x°	360°	X°	360°	×°	360°	Radius (Ft.)		
35	78.0*	8,300					35		
40	76.5	8,300					40		
45	75.0	8,300	l			1	45		
50	73.5	8,300	78.0*	8,200			50		
55	71.5	8,300	76.0	8,000		,	55		
60	70.0	8,300	74.5	7,800			60		
65	68.5	8,300	72.5	7,600	76.0	8,200	65		
70	67.0	8,300	71.0	7,400	74.5	6,100	70		
75	65.0	7,800	69.0	7,200	72.5	8,000	75		
80	63.0	7,100	67.0	7,000	70.5	5,800	80		
85	60.5	6,600	65.5	6,800	68.5	5,700	85		
90	58.5	6,000	63.0	8,300	66.5	5,700	90		
95	56.5	5,600	61.0	5,800	64.0	5,600	95		
100	54.5	5,100	58.5	5,300	62.0	5,500	100		
105	52.0	4,700	56.5	4,900	59.5	5,100	105		
110	49.5	4,300	54.0	4,500	57.0	4,700	110		
115	47.0	3,900	51.5	4,200	54.0	4,300	115		
120	44.5	3,400	48.5	3,800	51.5	4,000	120		
125	41.5	2,900	45.5	3,300	48.0	3,600	125		
130	38.5	2,500	42.5	2,900	44.5	3,100	130		
135		}	39.0	2,400	41.0	2,600	135		
140		l	35.5	2,000			140		

Do Not Lower 39.5 Ft. Offset Fly In Working Position Below 34.5 Degrees Main Boom Angle Unless Main Boom Length is 108 Ft. Or Less, Since Loss Of Stability Will Occur Causing A Tipping Condition. Refer To Page 5 For "Capacity Deductions For Auxiliary Load Handling Equipment".



ated Lifting Capacities in Pounds n Fully Extended Outriggers se Set Up Note 2.				ULL	16,000#			
Load		Offset	20° Offset		40°	Load		
Radius (Ft.)	Χ°	360°	X	360°	Δ°	360°	Aadiu (Ft.)	
40	77.0	8,300		1	····		40	
45	75.5	7,900					45	
50	73.5	7,500	i .			1	50	
55	72.0	7,100		1		l	55	
60	70.0	6,600	77.0	4,700		İ	60	
65	68.5	6,200	75.5	4,500		1	65	
70	66.5	5,800	73.5	4,200		i	70	
75	64.5	5,500	71.5	4,000	1	İ	75	
80	62.5	5,200	69.5	3,900	76.0	3,000	80	
85	60.5	4,900	67.5	3,700	74.0	3,000	85	
90	58.5	4,600	65.5	3,500	72.0	2,900	90	
95	56.5	4,400	63.5	3,400	69.5	2,600.	95	
100	54.5	4,200	61.5	3,300	67.5	2,700	100	
105	52.0	3,900	59.0	3,200	65.0	2,700	105	
110	50.0	3,800	57.0	3,100	62.5	2,600	110	
115	47.5	3,600	54.5	3,000	60.0	2,600	115	
120	45.0	3,400	52.0	2,900	57.0	2,500	120	
125	42.5	3,300	49.0	2,800	54.0	2,500	125	
130	39.5	3,100	46.5	2,700	50.5	2,500	130	
135	36.5	3,000	43.0	2,600	47.0	2,500	135	
140	33.0	2,800	39.5	2,600	42.5	2,500	140	
145	29.0	2,400	35.5	2,600			145	
150	24.5	2,100	31.0	2,400			150	
155	19.0	1,800	24.0	2,000			155	

#### **M** WARNING

Working Position Below 16 Degrees Main Boom Angle Unless Main ince Loss Of Stability Will Occur Causing A Tipping Condition. Note: Refer To Page 5 For "Capacity Deductions For Auxiliary Load Handling Equipment".

#### 🔏 Loaded Boom Angle in Degrees.



	Capacities ended Outri lote 2.				4			
			FULL		16,000#			
Load	2° Offset		20° Offset		40°	Load		
Radius (Ft.)	x°	360°	X °	360°	Δ°	360°	Aadius (Ft.)	
50	76.5	5,500					50	
55	75.5	5,500	1				55	
60	74.0	5,500					60	
65	73.0	5,500				1	65	
70	71.5	5,500	77.5	4,200		1	70	
75	70.0	5,300	78.0	4,000			75	
80	68.5	5,100	74.5	3,900			80	
85	67.0	4,900	73.0	3,800			85	
90	65.5	4,800	71.5	3,600	77.0	2,900	90	
95	64.0	4,600	70.0	3,500	75.0	2,800	95	
100	62.0	4,300	68.0	3,400	73.5	2,800	100	
105	60.5	3,900	68.5	3,300	71.5	2,700	105	
110	58.5	3,600	64.5	3,200	70.0	2,600	110	
115	58.5	3,200	63.0	3,100	68.0 -	2,600	115	
120	54.5	2,900	61.0	3,000	66.0	2,600	120	
125	52.5	2,700	59.0	2,900	64.0	2,500	125	
130	50.5	2,400	57.0	2,600	61.5	2,500	130	
135	48.5	2,200	54.5	2,300	59.5	2,500	135	
140			52.5	2,100	57.0	2,300	140	
145			50.0	1,900	54.5	2,000	145	
150			47.5	1,700	51.5	1,800	150	
155					48.5	1,600	155	

#### WARNING

Do Not Lower 67 Ft. Offset Fly in Working Position Selow 46 Degrees Main Boom Angle Unless Main Boom Longth is 99 Ft. Or Less, Since Loss Of Stability Will Occur Causing A Tipping Condition, lots: Refer To Page 5 For "Capacity Deductions For Auxiliary Load Handling Equipment".

<sup>Loaded Boom Angle in Degrees.
This capacity based on maximum obtainable boom angle.</sup> 

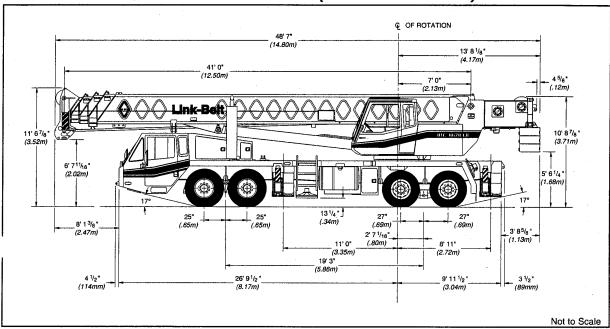
<sup>∠</sup> Loeded Boom Angle in Degrees.

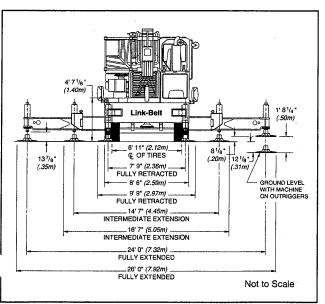


# **Specifications**

Hydraulic Truck Crane (Long Boom)

# HTC-8670LB 70-ton (63.5 metric ton)





General Dimensions	feet	meters
Turning radius (curb to curb)	41' 7"	12.67
Turning radius (wall to wall)	51' 9"	<i>15.77</i>
Ground clearance	13-1/4"	.34
Tailswing	13' 9"	4.19

Litho in U.S.A 1/99

#5271



# **Upperstructure**

#### Boom

**Patented Design.** Boom side plates have diamond shaped impressions for superior strength to weight ratio and 100,000 p.s.i. (689.5 MPa) steel angle chords for lateral stiffness. Boom telescope sections are supported by top, bottom, and adjustable side wear shoes to prevent metal to metal contact.

Microguard 434, Rated Capacity
Limiter "RCL" - Standard; Graphic
audio-visual warning system built into
corner post with anti-two block and
function limiters. Operating data available
includes boom length, boom angle, head
height, radius of load, machine configuration, allowed load, actual load and
percent of allowed load. Presettable
alarms for maximum and minimum boom
angles, max. tip height, max. boom
length, swing left/right positions. Operator
defined area alarm is standard. Anti-two
block weight designed for quick reeve of
hookblock.

Optional; Load rating bar graph for quick operator reference.

P ~ m — 41' - 127' (12.50 -38.71 m) section full-power boom.

Two Mode Boom Extension — The basic mode is the full power, synchronized mode of telescoping all sections proportionally to 127' (38.71 m).

The exclusive **A-max** mode (or mode 'A') extends only the inner mid section to 69.6' (21.21 m) offering increased capacities for in-close, maximum capacity picks.

**Boom head** — Five, 16 1/2" (0.42 m) root diameter nylon sheaves to handle up to 10 parts of wire rope. Easily removable wire rope guards; rope dead end lugs provided on each side of boom head. Boom head designed for quick reeve of hook block.

**Auxiliary lifting sheave** — *Optional;* Single, 16 1/2" (0.42 m) root diameter nylon sheave with removable wire rope guard, mounted to boom. For use with one or two parts of line off the optional front winch. Does not affect erection of fly or use of main head sheaves for multiple reeving.

**Boom elevation** — One Link-Belt designed hydraulic cylinder with holding with e and bushings in each end. Hand old for controlling boom elevation from -3° to + 78°.

# Fly

Optional — 39' 6" (12.04 m) offsettable stowable one-piece lattice fly. Can be offset 2°, 20°, or 40°.

Optional - 39' 6" - 67' (12.04 - 20.42 m) offsettable stowable 2-piece lattice type. Can be offset 2°, 20°, or 40°.

#### Cab and Controls

Environmental **ULTRA-CAB™** composed of laminated fibrous composite material; isolated from sound with acoustical fabric insulation, all tinted/tempered safety glass windows. Sliding rear/right side windows and swing-up roof window for maximum visibility and ventilation. Slideby-door opens to 36" (0.91 m) width. 6-way adjustable seat. Hydraulic control levers (joystick type). Hand-held outrigger controls and sight level bubble also provided. Foot controls for boom telescope, swing brake, and engine throttle. Hand throttle with lock.

**Cab instrumentation** — Corner post mounted gauges for hydraulic oil temperature, fuel, water temperature, voltmeter and oil pressure. Audio/visual warning system. Check engine and stop engine indicator lights.

## Swing

Bi-directional hydraulic swing motor mounted to a planetary reducer for 360° continuous smooth swing at 2 r.p.m.

**Swing park brake** — 360°, electric over hydraulic (spring applied, hydraulic released) multi-disc brake mounted on the speed reducer. Operated by toggle switch in overhead control console.

**Swing brake** — 360°, foot operated, hydraulic applied disc brake mounted on the speed reducer.

**Travel Swing lock** — Standard; two position travel swing lock (pin device) operated from the operator's cab.

Counterweight — Pinned to upperstructure frame. 12,000 lb. (5 443 kg) three piece design standard; 4,000 lbs. (1 814 kg) each piece. 16,000 lb. (7 258 kg) five piece design optional (dolly required for five piece arrangement). Hydraulic controlled counterweight removal standard. Counterweight sections may be lowered on and pinned to carrier deck to balance axle loadings for travel.

## Hydraulic System

**Main pump** — 2 gear pumps with a total of five sections. Combined pump capacity of 152 gpm (575 lpm). Powered by carrier engine with pump disconnect. Spline-type pump disconnect engaged/disengaged from carrier cab. Max. system operating pressure is 3,500 psi (24 133 kPa). Hydraulic oil cooler standard.

#### Pilot Pressure / Counterweight Removal

**Pump** — Pressure compensated piston pump powered by carrier engine with pump disconnect. Operates at 1,400 psi *(9 653 kPa)* maximum.

Steering / Fifth Outrigger Pump — Single gear type pump, 8 gpm (30 lpm) maximum. Powered by carrier engine through front gear housing. Pump operates at 1,600 psi (11 032 kPa).

**Reservoir** — 169 gallon (639.7 L) capacity. One diffuser for deaeration.

**Filtration** — One 6-micron filter located inside hydraulic reservoir. Accessible for easy replacement.

**Control valves** — 6 separate pilot operated control valves allow simultaneous operation of all crane functions.

#### Load Hoist System

Standard — 2M main winch with twospeed motor and automatic brake; power up/down mode of operation. Bi-directional piston-type hydraulic motor, driven through planetary reduction unit for positive control under all load conditions. Asynchronous parallel double crossover grooved drums minimize rope harmonic motion. Winch circuit control provides balanced oil flow to both winches for smooth, simultaneous operation.

Optional — 2M auxiliary winch with twospeed motor, automatic brake, and winch function lockout. Power up/down modes.

**Line pulls and speeds** — Maximum available line pull 17,100 lbs. *(7757 kg)* and maximum line speed of 495 f.p.m. *(150.88 m/min)* on 16" *(0.41 m)* root dia. grooved drum.

# Additional EquipmentStandard

Fire extinguisher, seat belt, horn, dome light, mirrors, electric windshield wiper/ washer, top hatch window wiper, defroster fan, sun screen, cup holder, backup alarm, audible swing alarm, electronic drum rotation indicators, cabmounted work lights, fly pinning alignment tool, and rotation resistant wire rope.

# Additional EquipmentOptional

360° swing lock (meets New York City requirements), diesel or hydraulic heater, 40 (36.3t), 60 (54.4t), and 70-ton (63.5t) quick reeve hook block, 8-1/2 ton (7.71 mt) hook and ball, rotating beacon, boom floodlight, air conditioning and single axis controls.









### Carrier



8' 6" *(2.59 m)* wide, 231" *(5.87 m)* wheelbase.

Standard - 8 x 4 drive.

**Frame** - 100,000 p.s.i. (689.5 MPa) steel, double walled construction with integral 100,000 p.s.i. (689.5 MPa) steel outrigger boxes.

#### Axles

Front - Tandem, 83.4" (2.12 m) track.

**Rear -** Tandem, 72.8" (1.85 m) track. 6.17 to 1.0 ratio with interaxle differential with lockout.

## Suspension

Front axle - Leaf spring suspension

Rear axle - Solid mount bogie beam type.

#### Wheels

Standard - Hub piloted steel disc

Optional- Hub piloted aluminum disc

#### Tires

**'tandard Front** - 445/65R22.5 (Load ange "L") single tubeless radials.

**Standard Rear** - 12R22.5 (Load range "H") dual tubeless radials.

Optional Front - 425/65R22.5 (Load range "L") single tubeless radials.

#### Brakes

**Service** - Full air brakes on all wheel ends with automatic slack adjusters. Dual circuit with modulated emergency brakes.

Front - 16.5 x 6 S-Cam brakes Rear - 16.5 x 7 S-Cam brakes

Parking/emergency — One spring set, air released chamber per rear axle end. Parking brake applied with valve mounted on carrier dash. Emergency brakes apply automatically when air drops below 60 psi (413.7 kPa) in both systems.

## Steering

Sheppard rack and pinion design.

#### Transmission

Eaton RTO — 14909MLL; 11 speeds forward, 3 reverse.

#### Electrical

Four 12-volt batteries provide 12-volt starting; 2,800 cold cranking amps available. 12-volt operating system, 130 amp alternator.

**Lights** - Four dual beam sealed headlights, front, side, and rear directional signals, stop and tail lights, rear and side clearance lights, license plate light and hazard warning lights.

# Outriggers

Three position (fully extended, intermediate and fully retracted) operation capability. Power hydraulic, double box, dual beam outriggers, front and rear. Recessed vertical jack cylinders, each equipped with integral holding valve. Beams extend to a maximum 24' 0" (7.32 m) centerline-to-centerline and retract to within 8' 6" (2.59 m) overall width. Equipped with four stowable, lightweight 24" (0.61 m) diameter aluminum floats. Standard fifth outrigger, with 14-3/4" (.37 m) dia. self-storing steel pad, is operable from ground or operators cab. Sight level bubble located in upperstructure cab.

#### Confined Area Lift Capacities (CALC)

**System** - Outriggers may be extended to an intermediate position (14' 7" - 4.45 m spread) for working in confined areas. Inner and outer beams are connected by an extend position pin which allows the outrigger beams to be fully extended or limits them to intermediate length based on the selected pin position. In addition, capacities are available with the beams in the 7' 9" (2.36 m) fully retracted position.

# Carrier Cab

One-man cab of LFC•2000 construction process featuring laminated fibrous composite material; acoustical insulation with cloth covering. Equipped with electric windshield wiper and washer, horn, air ride seat with seat belt, dome light, ashtray, defroster, 36,000 BTU capacity heater, door and windows locks, fire extinguisher, LH/RH rear view mirrors, tilt steering wheel, sliding RH and rear tinted windows, and roll up/down LH tinted window.

Cab instrumentation - Standard; illuminated instrument panel, speedometer, odometer, tachometer, voltmeter, hourmeter, fuel gauge, oil pressure gauge, water temperature gauge, front and rear air pressure gauges, audio/visual warning system, automotive type ignition, turn signal indicator, high beam light switch, fuses, and check engine and stop engine indicator lights.

# Additional EquipmentStandard

Aluminum fenders, carrier mounted outrigger controls with throttle control, cruise control, desiccant type air dryer, back-up warning alarm, tow hooks and shackles, steps to upper cab, lower cab and rear carrier, mud flaps, 120V electric engine block heater and engine brake.

# Additional EquipmentOptional

Ether injection starting package, rotating beacon, pintle hook, carrier mounted storage box, electrical and air connections for trailers and boom dollies, aluminum disc wheels, and spare tire and wheel assemblies.

# Carrier Speeds

			Spe	ed	
Gear		Ratio	mph	km/h	
	8th	.73	58.20	93.65	
High	7th	1.00	42.49	68.36	
	6th	1.38	30.79	49.54	
	5th	1.95	21.79	35.06	
	4th	2.77	15.34	24.68	
	3rd	3.79	11.21	18.04	
Low	2nd	5.23	8.12	13.07	
	1st	7.41	5.73	9.23	
	LO	16.30	2.61	4.19	
Deep	LL2	11.85	3.59	5. <i>77</i>	
Reduction	LL1	26.08	1.63	2.62	
Hi Rev.	Rev.	4.15	10.24	16.47	
Lo Rev.	Rev.	15.76	2.70	4.34	
Deep					
Reduction	Rev.	25.21	1.69	2.71	
Deep					
Reduction	LL1	26.08	0.47	0.75	
@ 600 rpm					
Deep					
Reduction	Rev.	25.21	0.48	0.77	
@ 600 rpm					



# Engine Specifications

gine	Detroit Diesel, Series 60 11.1L
Cylinders - cycle	6/4
Bore	5.12" <i>(130 mm)</i>
Stroke	5.47" <i>(139 mm)</i>
Displacement	677 cu. in. (11 096 cm³)
Maximum brake hp	365 @ 1800 rpm; 350 @ 2100 rpm
Peak torque	1,350 ft. lbs. (1 831 J) @ 1200 rpm
Electric system	12 volt neg. ground
Fuel capacity	100 gallons <i>(378.5 L)</i>
Alternator	12 volt, 130 amps
Crankcase capacity	32 qts. (30 L)

Axle	Max. Load @ 65 mph <i>(105 km/hr)</i>
Front	45,400 lbs. (20 593 kg) - aluminum disc wheels with 425/65R22.5 tires 46,400 lbs. (21 047 kg) - steel disc wheels with 445/65R22.5 tires 50,350 lbs. (22 838 kg) - steel or aluminum disc wheels



#### Axle Loads

Base machine with standard 41' 0" - 127' 0"	G.V.W.®		Upper facing front				
(12.50 m - 38.71 m) four-section boom, 2M main winch with 2-speed hoisting			Fro	nt axle	Rear axle		
and power up/down, 670' (183 m) 3/4" (19 mm) wire rope, 8x4, 8' 6" (2.59 m)	lbs.	kg	lbs.	kg	lbs.	kg	
carrier with Detroit Diesel Series 60 engine, 100 gal. (378 L) fuel, and no counterweight.	78,446	35583	37,775	17135	40,671	18448	
Cold weather starting aids -							
propane & ether	40	18	57	26	-17	-8	
Aluminum storage box	57	26	16	7	41	19	
425/65R22.5 front tires w/aluminum							
disc wheels	-408	-185	-408	-185	0	0	
12R22.5 rear tires w/aluminum							
disc wheels	-368	-167	0	0	-368	-167	
er in carrier cab	200	91	254	115	-54	-24	
shackles	40	18	23	10	17	8	
Pintle hook with air & electrical connections	30	14	-12	-5	42	19	
Air conditioning in carrier cab	100	45	127	57	-27	-12	
Auxiliary winch w/670' (183 m) rope -front	899	408	-388	-176	1,287	584	
Hydraulic heater	170	77	1	.5	169	76.5	
Diesel heater	70	32	1	.5	69	31.5	
Air conditioning in upper cab	120	54	-4	-2	124	56	
One slab of ctwt. on upper	4,000	1 814	-2,140	-971	6,140	2 785	
Two slabs of ctwt. on upper	8,000	3,629	-4,281	-1 942	12,281	5 571	
Three slabs of ctwt. on upper	12,000	5443	-6,421	-2913	18,421	8 356	
Three slabs of ctwt. on upper plus two cheek weights	16,000	7258	-8,661	-3929	24,561	11,141	
Fly brackets on boom base section							
for fly options	160	72	149	68	11	5	
39' 6" (12.04 m) fly stowed	1,602	727	1,550	703	52	24	
39' 6" - 67' (12.04 - 20.42 m) two-piece fly	2,380	1080	2,010	912	370	168	
40-ton (36t) hook block at front bumper	720	327	1,175	533	-455	-206	
70-ton (63.5t) hook block at front bumper	1,400	635	2,284	1 036	-884	-401	
Hookball at front bumper	360	163	587	266	-227	-103	
Auxiliary arm	110	50	203	92	-93	-42	
		-	F		Da	• •	
			Front	axie	Hear	axle	
Transfer one slab of ctwt. to carrier deck			5,333	2419	-5,333	-2 419	
Transfer two slabs of ctwt. to carrier deck			10,666	4 838	-10,666	-4 838	
Transfer three slabs of ctwt. to carrier deck			15,999	7257	-15,999	-7 <i>2</i> 57	

...just gross vehicle weight & axle loading according to component weight. Note: All weights are  $\pm$  3%

