MAXIM
1-877-MAX-LIFT

RTC-8050 Series II

50-ton *(45.36 mt)* Rough Terrain Telescopic Boom Crane

- 50-ton *(45.36 mt)* at 10 ft *(3.05 m)* radius
- 110 ft *(33.5 m)* full-power, four-section boom with quick-reeve boom head
- 168 ft *(51.2 m)* maximum tip height
- 51 ft *(15.5 m)* two-piece (bi-fold) fly, stowable, offsettable to 2°, 20° and 40° - Optional
- No deducts for stowed attachments
- A-max boom mode
- MG-434 rated capacity limiter
- Flat deck design with full length fenders
- 185 hp *(138.0kW)* Cummins engine
- Direct mounted electronic transmission
- Hydro-gas ride™ suspension
- Pilot-operated hydraulic controls

RTC-8040 Series II

40-ton *(36.29 mt)* Rough Terrain Telescopic Boom Crane

The RTC-8040 Series II boasts all of the outstanding features of the RTC-8050 Series II, the exceptions are:

- 40-ton *(36.29 mt)* at 10 ft *(3.05 m)* radius
- 110 ft *(33.0 m)* full-power, four-section boom with quick-reeve boom head
- 163 ft *(49.7 m)* maximum tip height
- 165 hp *(123.0kW)* Cummins engine

Link-Belt CRANES

RTC-8050
Series II
Rough Terrain Telescopic Boom Crane
50-ton *(45.36 mt)*

RTC-8040
Series II
Rough Terrain Telescopic Boom Crane
40-ton *(36.29 mt)*

Lightweight nylon head sheaves (including the optional auxiliary lifting sheave shown here) reduce overall machine weight and increase lift capacities.

Quick reeve boom head allows rope to be easily reeved over boom head.

The exclusive "A-Max" system provides optimum strength and stability. For in-close, big picks, the "A-Max" mode allows the operator to extend only the inner mid-section of the boom.

Hammerhead boom nose allows the operator to work at high boom angles.

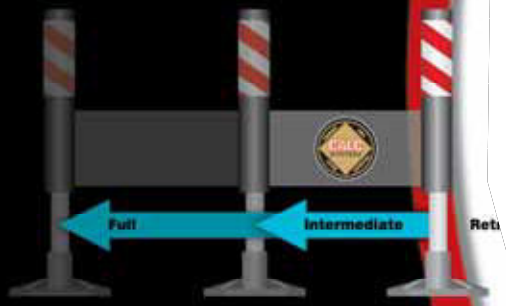
Type "RB" 18x19 wire rope is standard

Optional 51' (15.54 m) two-piece (bi-fold) lattice fly, stowable, offsettable to 2°, 20° and 40°

Mechanical boom angle indicator - standard

The "Boss" is Link-Belt's patented boom design of high-strength angle cords and high formability sidewall embossments.

The Confined Area Lifting Capacities (CALC) system provides three outrigger positions:
- *full retraction*
- *intermediate extension*
- *full extension*



Deep front storage box

Non-slip surface strips on carrier deck

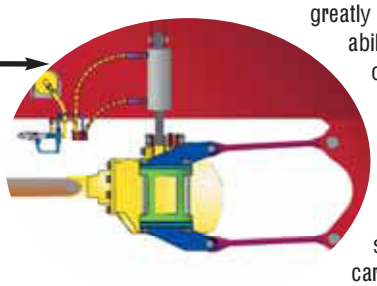
Integrated steps and hand-holds within the sheet metal

Folding steps for transport

Link-Belt
CONSTRUCTION EQUIPMENT

Smooth ride... 4-Link suspension

The fully independent rear 4-Link suspension greatly reduces the inherent bouncing at medium speeds and greatly improves handling, maneuverability and turning radius in both on- and off-road conditions. To further reduce the bounce, the exclusive Hydro-gas™ Ride system serves as a shock absorber through a charged accumulator system for greatly improved carrier stability.



Access is the name of the game

Fold-up steps and hand rails at six points and non-slip surface strips on the carrier's deck provide the ultimate in machine access.

The large rear grille door (above) and swing-out engine hood provide quick and easy access for routine service and maintenance.

Operators-Cab...

Roomier and more ergonomic than traditional cabs, the Cab features include:

- Larger window openings for increased operator visibilty
- Tilt-telescopic steering column now includes controls and switches for excellent operator control and comfort
- **Six-way adjustable fabric seat** with lift-up armrest (which deactivates control functions when raised)
- Armrest mounted, responsive **dual axis hydraulic controllers**
- Bubble level **sight level** mounted on console
- **Single foot pedal** control
- **Ducted air** through automotive-style directional vents
- **Sliding right side**, rear windows and swing-up roof window
- Corner-post-mounted, **backlit gauges**
- **Dashless** design
- Large, sweeping **electric wipers**

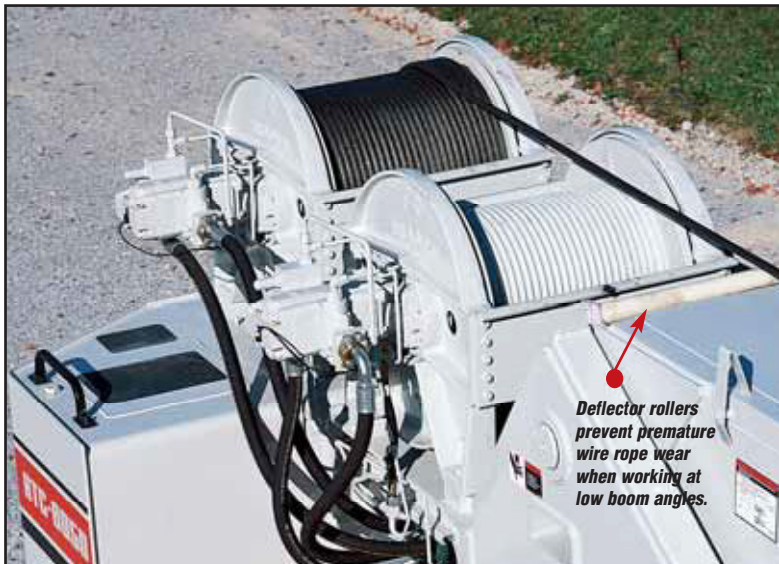
Standard load hoist system consists of a main winch with two-speed motor and automatic brake for power up/down mode of operation.

A bi-directional hydraulic motor, driven through a planetary reduction unit provides precise smooth load control with minimal rpm's.

Asynchronous, parallel double-over grooved drums minimize rope harmonic motion, improving spooling and increasing rope service life. A two-speed auxiliary winch is an available option.

Four modes of steering:
- *Independent front*
- *Coordinated four wheel*
- *Four wheel "crab"*
- *Independent rear*

Link-Belt's innovative two-part paint coating technology, coupled with a pre-assembly paint process, provides the finest quality coating system available today. Paint chipping, cracking and deterioration is significantly reduced when service work and disassembly are required.



Deflector rollers prevent premature wire rope wear when working at low boom angles.

With your Link-Belt distributor, your crane investment is always protected.

When you invest in a Link-Belt crane, you invest in a 125-year legacy of outstanding customer support through a worldwide Link-Belt distribution network. The value of a machine starts with state-of-the-art design and quality manufacturing, but excellent product support greatly impacts the fact that Link-Belt cranes traditionally command some of the highest resale prices in the industry.

The right people with the right part at the right time.

Highly trained crane technical specialists get to the core issues quickly to get you going again.

Through the Master Technician Training Program, technicians are specifically tested to establish proficiency in all phases of machine diagnostics and repair. At our Service Training Center, schools are held throughout the spring and fall for both distributor technicians and customers.

Supporting these trained distributor personnel, experienced factory advisors with comprehensive machine records, CAD computer terminals, and technical electronic publication libraries stand ready to isolate facts and quickly act to resolve crane service issues.

With eParts, our online computer system, distributors worldwide can order Genuine Link-Belt Parts 24 hours a day, seven days a week. Our dedicated 72,000 sq. ft. Parts Distribution Center is an integral part of Link-Belt's product support where all parts in stock ship the same business day.

Litho in U.S.A. 2/05 #4301 (supersedes #4266)

Link-Belt Construction Equipment Company is a leader in the design, manufacture and sales of telescopic and lattice boom cranes, with headquarters in Lexington, Kentucky.

In the recent decade, a dynamic and highly focused Link-Belt has emerged as a market leader in crane design and product quality standards by focusing on continuous improvement and employee empowerment.

Link-Belt operates on the principles of continuous quality improvement, ISO 9001, and established values that support the vision of quality. These principles result in reduction in waste, better use of company resources and improved employee and customer satisfaction.

With major capital improvements over the last ten years, along with continuous improvement philosophies, this facility has emerged as the most modern crane facility in North America.

Link-Belt
CONSTRUCTION EQUIPMENT

Lexington, Kentucky
www.linkbelt.com

Technical Data

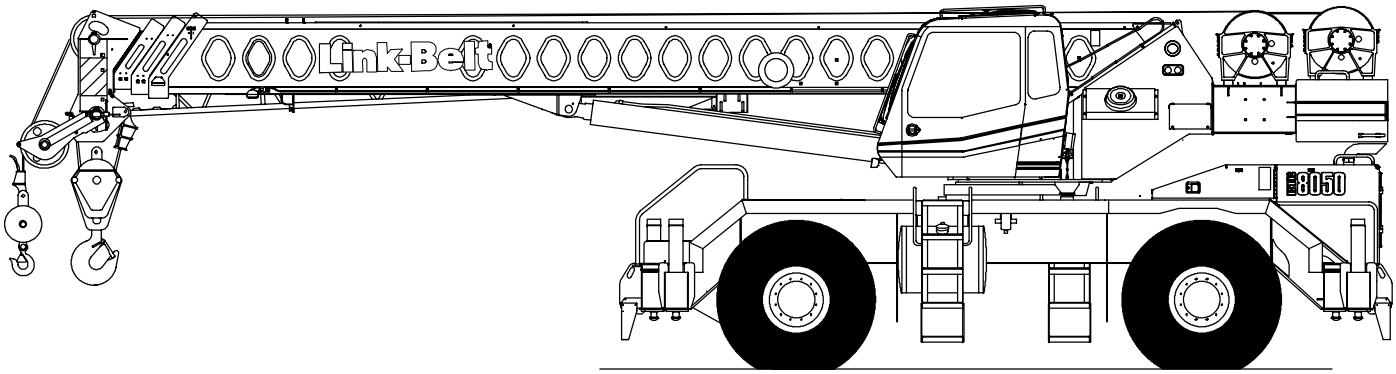
Specifications & Capacities

RTC 8050

Series II

Telescopic Boom Rough Terrain Crane

50 ton *(45.35 metric ton)*



CAUTION: This material is supplied for reference use only. Operator must refer to in – cab Crane Rating Manual and Operator's Manual to determine allowable crane lifting capacities and assembly and operating procedures.

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Boom, Attachments, and Upper Structure

■ Boom

Design – Four section, box type construction of high tensile steel consisting of one base section and three telescoping sections. The vertical side plates have diamond shaped steel impressions for superior strength to weight ration. The first telescoping section extends independently by means of one double–acting, single stage hydraulic cylinder with integrated holding valves. The second and third telescoping sections extend proportionally by means of one double–acting, single stage cylinder with integrated holding valves and cables.

Boom

- 35 ft 6 in–110 ft (*10.8–33.5m*) four section full power boom
- Two mode boom extension: *A–max* mode provides superior capacities by extending the first telescoping section to 60 ft 4 in (*18.4m*). Standard mode synchronizes all the telescoping sections proportionally to 110 ft (*33.5m*). Controlled from the operator's cab.
- Mechanical boom angle indicator
- Maximum tip height for *A–max* mode is 70 ft (*21.3m*) and standard mode is 118 ft 5 in (*36.1m*).

Boom Head

- Four 16.5 in (*41.9cm*) root diameter nylon sheaves to handle up to eight parts of line
- Easily removable wire rope guards
- Rope dead end lugs on each side of the boom head
- Boom head is designed for quick–reeve of the hook block

Boom Elevation

- One double acting hydraulic cylinder with integral holding valve
- Boom elevation: –3° to 78°

Auxiliary Lifting Sheave – Optional

- Single 16.5 in (*41.9m*) root diameter nylon sheave
- Easily removable wire rope guards
- Does not affect erection of the fly or use of the main head sheaves

Hook Blocks and Balls – Optional

- 40 ton (*36.3mt*) 4 sheave quick–reeve hook block with safety latch
- 60 ton (*54.4mt*) 4 sheave quick–reeve hook block with safety latch
- 8.5 ton (*7.7mt*) swivel and non–swivel hook balls with safety latch

Fly – Optional

- 28 ft 6 in (*8.7m*) one piece lattice fly, stowable, offsettable to 2°, 20°, and 40°. Maximum tip height is 146 ft (*44.5m*).
- 28 ft 6 in–51 ft (*8.7–15.5m*) two piece bi–fold lattice fly, stowable, offsettable to 2°, 20°, and 40°. Maximum tip height is 168 ft (*51.2m*).

■ Operator's Cab and Controls

Environmental Cab – Fully enclosed, one person cab of galvaneal steel structure with acoustical insulation. Equipped with:

- Tinted and tempered glass windows
- Extra–large fixed front window with windshield wiper and washer
- Swing up roof window with windshield wiper
- Sliding left side door with large fixed window
- Sliding rear and right side windows for ventilation
- Six way adjustable, cushioned seat with seat belt and storage compartment
- Engine dependent warm–water heater with air ducts for front windshield defroster and cab floor
- Defroster fan for the front window
- Bubble level
- Circulating fan
- Adjustable sun visor
- Dome light
- Cup holder
- Fire extinguisher
- Left side viewing mirror
- Two position travel swing lock

Air Conditioning – Optional – Integral with cab heating system utilizing the same ventilation outlets

Steering Column – Pedestal type with tilt and telescope functions for operator comfort. Column includes the following controls and indicators:

Left and right levers include:

- Horn button
- Turn signal switch
- Driving light switch
- Transmission direction switch

Panel mounted switches for:

- Travel park brake
- Steer mode selector
- 4 wheel drive
- Transmission gear selector
- Ether start
- Hazard flasher

Panel mounted indicator/warning lights for:

- Transmission display
- Transmission temperature
- Engine oil pressure
- Travel park brake
- Service brake
- Turn signals
- Rear wheel offset–optional
- Emergency steer – optional

Armrest Controls – Two dual axis hydraulic joystick controllers or optional single axis hydraulic controllers for:
- Swing
- Boom hoist
- Main rear winch
- Auxiliary front winch – optional
- Drum rotation indication
- Drum rotation indicator activation switch
- Winch high/low speed and disable switch(es)
- Third wrap selector switch – optional
- Telescopic override switches
- Warning horn button
- Swing park brake

Outrigger Controls – Hand held control box with umbilical cord gives the operator the freedom to view operation while setting the outriggers.

Foot Controls
- Boom telescope
- Swing brake
- Engine throttle

Right Front Console – Controls and indicators for:
- Engine ignition
- Engine throttle lock
- Function disable
- Front windshield wiper and washer
- Cab floodlights
- Warning horn
- Heating controls
- Console dimmer switch
- Bubble level
- 12 volt power connection
- Air conditioning – optional
- Boom floodlight – optional
- Rotating beacon/Strobe light – optional
- Third wrap indicator – optional

Cab Instrumentation – Ergonomically positioned, analog instrumentation for crane operation including:
- Engine coolant temperature with warning indicator
- Hydraulic oil temperature with warning indicator
- Fuel level with warning indicator
- Tachometer

Rated Capacity Limiter – Microguard 434 graphic audio–visual warning system integrated into the dash with anti–two block and function limiter. Operating data available includes:
- Crane configuration
- Boom length and angle
- Boom head height
- Allowed load and % of allowed load
- Boom angle
- Radius of load
- Actual load
- Operator settable alarms (include):
  - Maximum and minimum boom angles
  - Maximum tip height
  - Maximum boom length
  - Swing left/right positions
  - Operator defined area (imaginary plane)

Internal RCL Light Bar – Optional – Visually informs the operator when crane is approaching maximum load capacity with a series of green, yellow, and red lights.

External RCL Light Bar – Optional – Visually informs the ground crew when crane is approaching maximum load capacity with a series of green, yellow, and red lights.

■ Swing

Motor/Planetary – Bi–directional hydraulic swing motor mounted to a planetary reducer for 360˚ continuous smooth swing at 2.5 rpm.

Swing Park Brake – 360˚, electric over hydraulic, (spring applied/hydraulic released) multi–disc brake mounted on the speed reducer. Operated by a switch from the operator's cab.

Swing Brake – 360˚, foot operated, hydraulic applied disc brake mounted to the speed reducer.

Swing Lock – Two–position swing lock (boom over front or rear) operated from the operator's cab.

360˚ Positive Swing Lock – Optional – Meets New York City requirement.

■ Electrical

Swing Alarm – Audio warning device signals when the upper is swinging.

Lights
- Two working lights on front of the cab
- One rotating amber beacon on top of the cab – optional
- One amber strobe beacon on top of the cab – optional
- Boom floodlight – optional

■ Load Hoist System

Load Hoist Performance

Main (Rear) and Auxiliary (Front) Winches – 3/4 in (*19mm*) Rope										
	Maximum Line Pull		Normal Line Speed		High Line Speed		Layer		Total	
Layer	lb	*kg*	ft/min	*m/min*	ft/min	*m/min*	ft	*m*	ft	*m*
1	15,390	*6 980.8*	168	*51.2*	337	*102.7*	114	*34.7*	114	*34.7*
2	14,150	*6 418.3*	183	*55.8*	366	*111.6*	124	*37.8*	238	*72.5*
3	13,094	*5 939.3*	198	*60.4*	396	*120.7*	134	*40.8*	372	*113.4*
4	12,185	*5 527.0*	212	*64.6*	425	*129.5*	144	*43.9*	516	*157.3*
5	11,394	*5 168.2*	227	*69.2*	455	*138.7*	154	*46.9*	670	*204.2*

Wire Rope Application		Diameter		Type	Maximum Permissible Load	
		in	*mm*		lb	*kg*
Main (Rear) Winch	Standard	3/4	*19*	18x19 rotation resistant – right regular lay (Type RB)	12,920	*5 860.5*
	Optional	3/4	*19*	36x7 rotation resistant – right regular lay (Type ZB)	15,600	*7 076.2*
Auxiliary (Front) Winch	Standard	3/4	*19*	18x19 rotation resistant – right regular lay (Type RB)	12,920	*5 860.5*
	Optional	3/4	*19*	36x7 rotation resistant – right regular lay (Type ZB)	15,600	*7 076.2*

2M Main and Optional Auxiliary Winches

- Bi–directional gear–type (2–speed) hydraulic motors driven through planetary reduction unit for positive control under all load conditions.
- Grooved lagging
- Power up/down mode of operation
- Hoist drum cable follower
- Drum rotation indicator
- Drum diameter: 16 in (*40.6cm*)
- Rope length:
  - Main: 600 ft (*182.9m*)
  - Auxiliary: 600 ft (*182.9m*)
- Maximum rope storage: 834 ft (*254.2m*)
- Terminator style socket and wedge

Third wrap indicator – optional – Visually and audibly warns the operator when the wire rope is on the first/bottom layer and when the wire rope is down to the last three wraps.

■ Hydraulic System

Counterbalance Valves – All hoist motors, boom extend cylinders, and boom hoist cylinders are equipped with counterbalance valves to provide load lowering and prevents accidental load drop when hydraulic power is suddenly reduced.

■ Counterweight

Total of 12,500 lb (*5 670kg*) of counterweight bolted to the upper structure frame with capacities for the 12,500 lb (*5 670kg*) configuration.

Carrier

■ General

- 10 ft 10.5 in (*3.31m*) wide
- 12 ft 7 in (*3.83m*) wheelbase (centerline of first axle to centerline of second axle).

Frame – Box–type, torsion resistant, welded construction made of high tensile steel. Equipped with front and rear towing and tie–down lugs, tow connections, and access ladders.

■ Outriggers

Boxes – Two double box, front and rear welded to carrier frame.

Beams and Jacks – Four single stage beams with Confined Area Lifting Capacities (CALC™) provide selectable outrigger extensions of full, intermediate, and retracted. Hydraulically controlled from the operator's cab with integral check valves.

Pontoons – Four lightweight, quick release, 19.25 x 19.25 in (*48.90 x 48.90cm*), steel pontoons with contact area of 307 in^2 (*1 980.6*cm^2) can be stored for road travel in storage racks on the carrier.

Main Jack Reaction – 63,500 lb (*28 803kg*) force and 213 psi (*1 469kPa*) ground bearing pressure.

■ Steering and Axles

Steering – Four independent modes consisting of two wheel front, two wheel rear, four wheel, and crab. Each mode is controlled from the steering wheel and is selected by a switch in the operator's cab.

Drive – Two modes: 4 x 2 and 4 x 4 for off highway travel
Axle 1 – Steered, non–driven for 4 x 2 and steered, driven for 4 x 4
Axle 2 – Steered, driven

■ Suspension

Front – Rigid mount to the carrier frame

Rear – The rear axle is suspended on the oscillation cylinders with motion of the axle controlled by a four bar linkage system. The oscillation cylinders lockout when the upper structure rotates 2.5° past centerline.

- Hydro–gas rear suspension – optional

■ Tires and Wheels

Front and Rear – Four (single) 23.5 x 25–20 ply rating, earthmover type tires on steel disc wheels

- Spare tires and wheels – optional

■ Brakes

Service – Full hydraulic, dual circuit, disc type brakes on all wheel ends

Parking/**Emergency** – Spring loaded type, acting on front axle

■ Electrical

Three batteries provide 12 volt operation and starting

Lights

- Front lighting includes two main headlights, and two parking/directional indicators.
- Side lighting includes two parking/directional indicators per side.
- Rear lighting includes two parking/directional indicators, two parking/brake lights, and two reversing lights.
- Other equipment includes hazard/warning system, cab light, instrument panel light, and signal horn.

■ Engine

Specification	Cummins 6BT 5.9L
Numbers of Cylinders	6
Cycle	4
Bore and Stroke: inch (*mm*)	4.02 x 4.72 (*102 x 120*)
Piston Displacement: in^3 (*L*)	359 (*5.9*)
Max. Brake Horsepower: hp (*kW*)	165 (*123*) @ 2,500 rpm
Peak Torque: ft lb (*Nm*)	440 (*597*) @ 1,600 rpm
Alternator: volts – amps	12 – 130
Crankcase Capacity: qt (*L*)	17.2 (*16.3*)

- Mechanically driven fan and thermostatically controlled radiator
- Water/Fuel separator
- 110–volt block heater
- Ether injection package

■ Transmission

Powershift – Fully automatic transmission with eight speeds forward and four reverse. Rear axle disconnect for two or four wheel drive. Rear axle disconnects automatically in forward fifth and higher gears.

Carrier Speeds and Gradeability

Funk			Speed		Gradeability (@ 70% Convertor efficiency)
Gear		Ratio	mph	*km/h*	% Grade
8th	Forward 2WD	0.74	25.9	*41.7*	3.2
7th		1.03	18.5	*29.8*	5.3
6th		1.45	13.2	*21.2*	8.3
5th		2.03	9.4	*15.1*	12.5
4th	Forward 2WD or 4WD	2.90	6.6	*10.6*	19.0
3rd		4.05	4.7	*7.6*	27.8
2nd		5.72	3.3	*5.4*	42.0
1st		7.99	2.4	*3.9*	65.6
4th	Reverse 2WD or 4WD	1.03	18.5	*29.8*	5.3
3rd		2.03	9.4	*15.1*	12.5
2nd		4.05	4.7	*7.6*	27.8
1st		7.99	2.4	*3.8*	65.6

Based on a gross vehicle weight of 80,000 lb (*36 287kg*).

Crane operating angle must not exceed 35˚ (77% grade).

Fuel Tank

One 75 gallon (*283.9L*) capacity tank

Hydraulic System

All functions are hydraulically powered allowing positive precise, control with independent or simultaneous operation of all functions.

Main Pumps

- Three fixed displacement gear pumps for the main and auxiliary winches, swing, boom hoist, and telescope circuits with a manual disconnect to aid during cold weather starts.
- One gear pump for the outriggers, power steering, brakes, and telescope circuits.
- One pressure compensated piston pump is used in the control, service brake, and counterweight removal circuits.
- Combined pump capacity of 139 gpm (*526.2Lpm*).

Hydraulic Reservoir – 131 gal (*495.9L*) capacity equipped with sight level gauge. Diffusers built in for deaeration.

Filtration – One 10 micron, full flow, line filter in the control circuit. All oil is filtered prior to return to sump tank. Accessible for easy filter replacement.

Pump Drive

All pumps are mechanically driven by the diesel engine. Main and auxiliary winches, swing, boom hoist, and telescope pumps are mounted to a mechanical pump disconnect on the transmission torque convertor to aid in cold weather starting.

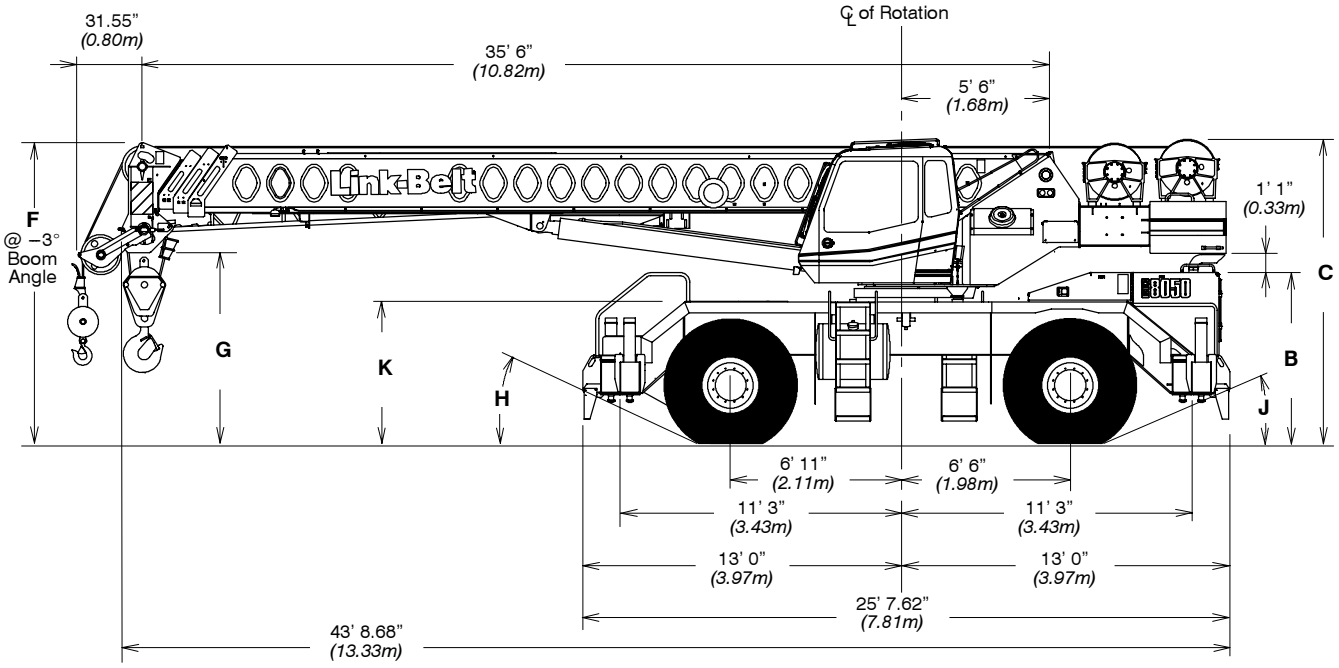
Axle Loads

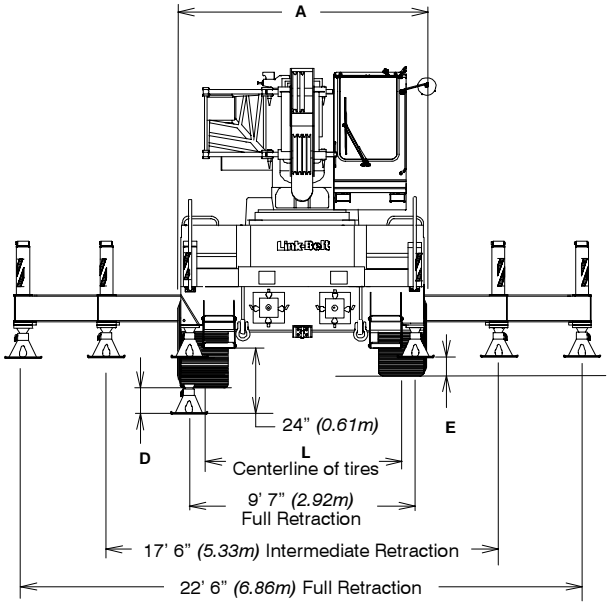
Base crane with full tank of fuel	Gross Vehicle Weight ([1])		Upper Facing Front				Upper Facing Rear			
			Front Axles		Rear Axles		Front Axles		Rear Axles	
	lb	*kg*	lb	*kg*	lb	*kg*	lb	*kg*	lb	*kg*
	72,495	***32 883***	**33,996**	***15 420***	**38,499**	***17 463***	**32,896**	***14 921***	**39,599**	***17 962***
23.5R25 tires and wheels	368	*167*	183	*83*	185	*84*	183	*83*	185	*84*
Pintle hook, front	13	*6*	18	*8*	–5	*–2*	18	*8*	–5	*–2*
Pintle hook, rear	13	*6*	–5	*–2*	18	*8*	–5	*–2*	18	*8*
Rear steer indicator	3	*1*	0	*0*	3	*1*	0	*0*	3	*1*
Hydro–gas suspension	52	*24*	18	*8*	34	*15*	18	*8*	34	*15*
Winch roller – rear winch	93	*42*	–39	*–18*	132	*60*	129	*59*	–36	*–17*
Winch roller – front winch	93	*42*	–19	*–9*	112	*51*	109	*49*	–16	*–7*
2M auxiliary winch	19	*9*	–2	*–0.9*	21	*10*	21	*10*	–2	*–0.9*
600 ft (*182.9m*) of 3/4 in (*19mm*) wire rope on auxiliary winch	669	*303*	–88	*–40*	757	*343*	734	*333*	–65	*–30*
Air conditioning in operator's cab	315	*143*	74	*34*	241	*109*	231	*105*	84	*38*
360˚ swing lock	76	*34*	28	*13*	48	*22*	45	*20*	31	*14*
Emergency steer system	136	*62*	15	*7*	121	*55*	116	*53*	20	*9*
Fly storage brackets to boom base section for fly options	99	*45*	146	*66*	–47	*–21*	–51	*–23*	150	*68*
28.5 ft (*8.68m*) offset fly – stowed	1,291	*585*	2,237	*1 015*	–947	*–430*	–990	*–449*	2,281	*1 035*
28.5–51 ft (*8.68–15.54m*) offset fly – stowed	1,861	*844*	3,060	*1 388*	–1,199	*–544*	–1,263	*–573*	3,124	*1 417*
Floodlight to boom base section	10	*5*	23	*10*	–13	*–6*	–13	*–6*	23	*10*
60 ton (*54.4mt*) hook block at front/rear bumper	1,109	*503*	1,530	*694*	–421	*–191*	–459	*–208*	1,568	*711*
40 ton (*36.3mt*) hook ball at front/rear bumper	720	*327*	994	*451*	–274	*–124*	–298	*–135*	1,108	*462*
8.5 ton (*7.7mt*) hook ball at front/rear bumper	360	*163*	497	*225*	–137	*–62*	–149	*–68*	509	*231*
Auxiliary lifting sheave	91	*41*	257	*117*	–166	*–75*	–169	*–77*	260	*118*

Tire	Maximum Load @ 25 mph (*40.2km/h*)
23.5 x 25 (20–PR)	38,000 lb (*17 600kg*)
23.5R25 2 Star	37,500 lb (*17 010kg*)

([1]) Adjust gross vehicle weight and axle loading according to component weight.
Note: All weights are ±3%.

General Dimensions





Turning Radius – Front Wheel (4x2) Steering	English	*Metric*
Wall to wall over carrier	39' 0"	*11.9m*
Wall to wall over boom	47' 7"	*14.5m*
Wall to wall over boom attachment	49' 7"	*15.1m*
Curb to curb	37' 3"	*11.4m*
Centerline of tire	36' 0"	*11.0m*

Turning Radius – All Wheel (4x4) Steering	English	*Metric*
Wall to wall over carrier	23' 4"	*7.1m*
Wall to wall over boom	34' 0"	*10.4m*
Wall to wall over boom attachment	35' 6"	*10.8m*
Curb to curb	21' 4"	*6.5m*
Centerline of tire	20' 0"	*6.1m*

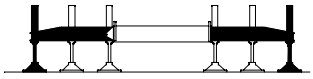
Tail Swing	English	*Metric*
With counterweight	12' 8"	*3.9m*
Without counterweight	N/A	*N/A*

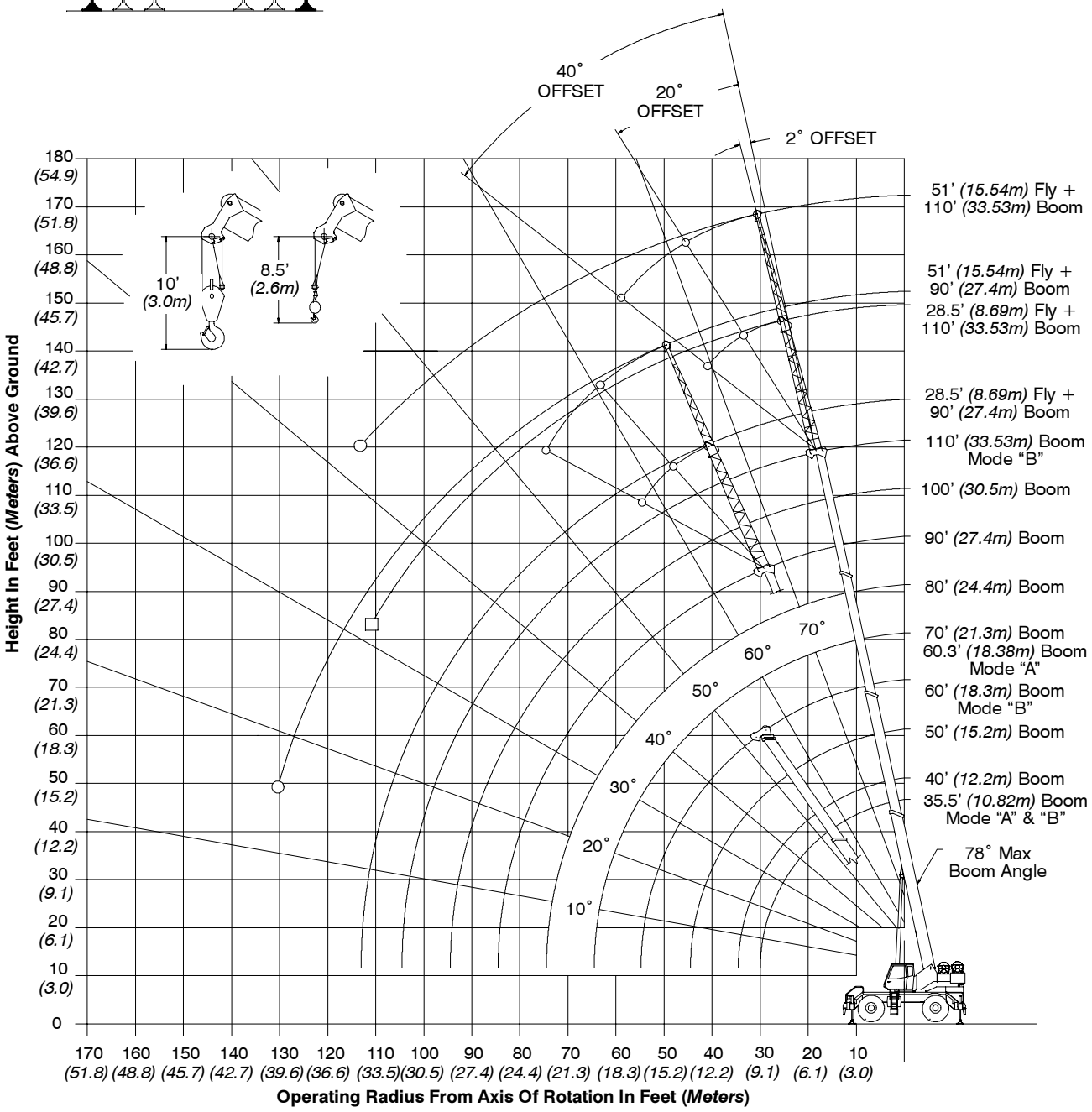
General Dimensions	Tire Size			
	23.5 x 25 bias		23.5R25 radial	
	English	*Metric*	English	*Metric*
A	10' 3.5"	*3.14m*	10' 3"	*3.12m*
B	6' 7.75"	*2.03m*	6' 9.5"	*2.06m*
C	11' 11.75"	*3.65m*	12' 1.5"	*3.70m*
D	7.75"	*0.20m*	7"	*0.18m*
E	10"	*0.25m*	11.75"	*0.30m*
F	10' 0.25"	*3.05m*	10' 2"	*3.10m*
G	7' 6"	*2.29m*	7' 7.75"	*2.33m*
H	24°	– –	24.8°	– –
J	21°	– –	22°	– –
K	6' 6.75"	*1.69m*	6' 8.5"	*1.74m*
L	8' 3"	*2.51m*	8' 3"	*2.51m*

Not To Scale

Working Range Diagram

Working Range Diagram
On Fully Extended Outriggers



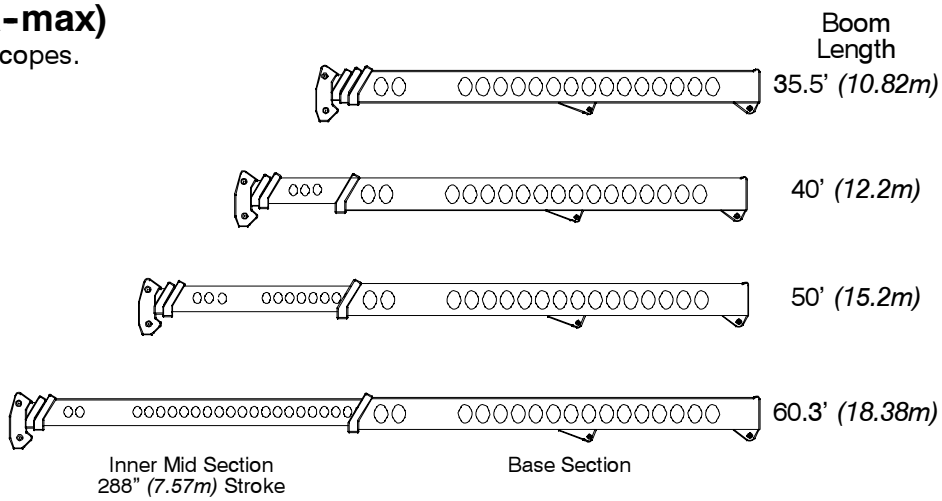


○ **Denotes Main Boom + 51' *(15.5m)* Fly–Boom Mode "B"**
□ **Denotes Main Boom + 28.5' *(8.7m)* Fly–Boom Mode "B"**

Boom Extend Modes

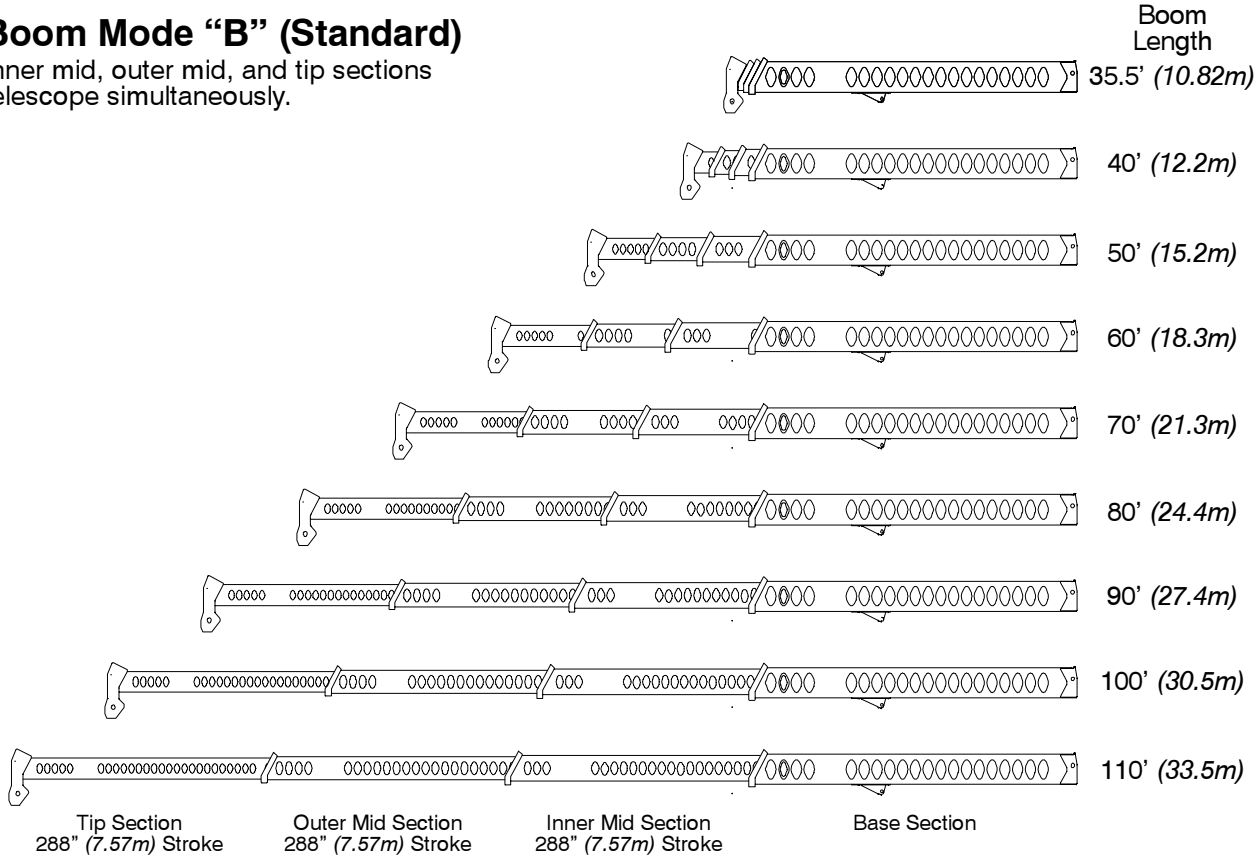
Boom Mode “A” (A-max)

Only inner mid section telescopes.



Boom Mode “B” (Standard)

Inner mid, outer mid, and tip sections telescope simultaneously.



Main Boom Lift Capacity Charts – Standard

Fully Extended Outriggers – 360˚ Rotation
(All Capacities Are Listed In Pounds)

Radius (ft)	Boom Length (ft)									Radius (ft)
	35.5	40	50	60/60.3	70	80	90	100	110	
10	100,000	78,400	72,600							10
12	73,900	73,100	65,600	50,900**	37,900					12
15	63,200	63,000	57,500	46,900**	37,900	35,400				15
20	50,300	50,100	47,600	39,200**	37,900	34,700	28,900			20
25	39,000	38,900	38,500	37,900	37,900	34,200	28,200	24,000	19,500	25
30		31,300	31,900	32,300	32,500	30,300	24,800	22,500	19,500	30
35			26,100	26,500	26,700	26,900	22,000	19,900	18,300	35
40			20,800	21,200	21,400	21,500	19,700	17,800	16,400	40
45				17,100	17,300	17,400	17,500	15,900	14,600	45
50				13,900	14,200	14,300	14,400	14,400	13,200	50
55					11,900	12,100	12,200	12,200	12,100	55
60					10,000	10,200	10,300	10,300	10,400	60
65						8,600	8,700	8,800	8,900	65
70						7,300	7,500	7,500	7,600	70
75							6,400	6,500	6,500	75
80							5,400	5,500	5,600	80
85								4,700	4,800	85
90								4,000	4,100	90
95									3,500	95
100									2,900	100

* Special Conditions Or Wire Rope Required
** 60.3 A–max Mode

This information is not for crane operation. Operator must refer to the in–cab information for crane operation. Rated lifting capacities shown on fully extended outriggers do not exceed 85% of the tipping loads and on tires do not exceed 75% of the tipping loads.

On Tires – Stationary – Boom Centered Over Front Between Tire Tracks
(All Capacities Are Listed In Pounds)

Radius (ft)	Boom Length (ft)					Radius (ft)
	35.5	40	50	60	70	
10	47,300	47,100				10
12	41,600	41,400				12
15	35,100	35,000	35,800			15
20	27,400	27,300	28,200	28,500		20
25	21,900	21,700	22,900	23,200	23,400	25
30		16,100	16,700	17,100	17,200	30
35			12,600	12,900	13,100	35
40			9,700	10,100	10,300	40
45				7,900	8,200	45
50				6,300	6,500	50
55					5,200	55
60					4,200	60

On Tires – Pick & Carry (Creep) – Boom Centered Over Front
(All Capacities Are Listed In Pounds)

Radius (ft)	Boom Length (ft)					Radius (ft)
	35.5	40	50	60	70	
10	44,100	43,900				10
12	38,400	38,200				12
15	31,800	32,000	32,400			15
20	24,000	24,300	24,700	25,000		20
25	18,600	19,000	19,500	19,800	19,900	25
30		15,100	15,600	15,900	16,100	30
35			12,600	12,900	13,100	35
40			9,700	10,100	10,300	40
45				7,900	8,200	45
50				6,300	6,500	50
55					5,200	55
60					4,200	60

On Tires – Stationary – 360° Rotation
(All Capacities Are Listed In Pounds)

Radius (ft)	Boom Length (ft)					Radius (ft)
	35.5	40	50	60	70	
10	37,200	37,400	37,700			10
12	31,100	31,400	31,800			12
15	24,000	24,400	24,900			15
20	14,500	14,800	15,400	15,700		20
25	9,400	9,800	10,300	10,700	10,900	25
30		6,600	7,100	7,500	7,700	30
35			5,000	5,300	5,500	35
40			3,400	3,700	3,900	40
45				2,500	2,700	45

This information is not for crane operation. Operator must refer to the in–cab information for crane operation. Rated lifting capacities shown on fully extended outriggers do not exceed 85% of the tipping loads and on tires do not exceed 75% of the tipping loads.

Fly Attachment Lift Capacity Charts – Optional

Fully Extended Outriggers – 360° Rotation
(All Capacities Are Listed In Pounds)

110 ft Main Boom Length 2° Fly Offset			110 ft Main Boom Length 20° Fly Offset			110 ft Main Boom Length 40° Fly Offset		
Radius (ft)	Fly Length (ft)		Radius (ft)	Fly Length (ft)		Radius (ft)	Fly Length (ft)	
	28.5	51		28.5	51		28.5	51
35	9,400		45	9,500		50	7,500	
40	9,400		50	9,100		55	7,300	
45	9,400	6,200	55	8,400		60	7,100	
50	9,400	6,200	60	7,800	4,800	65	6,900	
55	9,200	6,200	65	7,300	4,600	70	6,500	
60	8,500	6,200	70	6,800	4,400	75	6,100	3,400
65	7,900	6,000	75	6,400	4,300	80	5,800	3,400
70	7,300	5,700	80	6,000	4,100	85	5,500	3,300
75	6,800	5,300	85	5,700	4,000	90	5,200	3,200
80	6,200	4,900	90	5,000	3,800	95	4,600	3,200
85	5,300	4,600	95	4,300	3,700	100	3,900	3,100
90	4,600	4,300	100	3,700	3,500	105	3,300	3,100
95	4,000	4,000	105	3,200	3,300	110	2,800	3,000
100	3,500	3,800	110	2,700	3,200	115		2,900
105	3,000	3,500	115	2,300	3,000	120		2,800
110	2,500	3,000	120		2,600	125		2,400
115	2,100	2,600	125		2,200	130		2,000
120		2,200	130		1,900			

This information is not for crane operation. Operator must refer to the in–cab information for crane operation. Rated lifting capacities shown on fully extended outriggers do not exceed 85% of the tipping loads and on tires do not exceed 75% of the tipping loads.

Main Boom Lift Capacity Charts – Optional (Metric)

Fully Extended Outriggers – 360° Rotation
(All Capacities Are Listed In Kilograms)

Radius (m)	Boom Length (m)									Radius (m)
	10.82	12.2	15.2	18.3/18.38	21.3	24.4	27.4	30.5	33.53	
3.0	45 350	35 550	33 250							3.0
3.5	34 550	34 050	30 550							3.5
4.0	31 550	31 350	28 350	23 050**	17 150					4.0
4.5	29 000	28 900	26 350	21 450**	17 150					4.5
5.0	26 750	26 700	24 650	20 200**	17 150	16 050				5.0
6.0	23 100	23 050	21 850	17 950**	17 150	15 700	13 100			6.0
7.0	19 650	19 600	19 450	17 150	17 150	15 700	13 100	10 850		7.0
8.0	16 650	16 850	17 100	17 150	16 600	15 050	12 400	10 850	8 800	8.0
9.0	13 000	14 400	14 700	14 800	14 900	13 850	11 400	10 300	8 800	9.0
10.0		11 700	12 050	12 150	12 200	12 250	10 500	9 500	8 750	10.0
12.0			8 550	8 700	8 800	8 850	8 900	8 200	7 550	12.0
14.0				6 550	6 650	6 700	6 750	6 750	6 500	14.0
16.0				5 050	5 200	5 250	5 300	5 350	5 350	16.0
18.0					4 100	4 200	4 250	4 250	4 300	18.0
20.0						3 350	3 400	3 450	3 450	20.0
22.0						2 700	2 750	2 800	2 850	22.0
24.0							2 250	2 300	2 350	24.0
26.0								1 850	1 900	26.0
28.0								1 500	1 550	28.0
30.0									1 250	30.0

* Special Conditions Or Wire Rope Required
** 18.38 A–max Mode

This information is not for crane operation. Operator must refer to the in–cab information for crane operation. Rated lifting capacities shown on fully extended outriggers do not exceed 75% of the tipping loads and on tires do not exceed 65% of the tipping loads.

On Tires – Stationary – Boom Centered Over Front Between Tire Tracks
(All Capacities Are Listed In Kilograms)

Radius (m)	Boom Length (m)					Radius (m)
	10.82	12.2	15.2	18.3	21.3	
3	21 700					3
3.5	19 500	19 400				3.5
4	17 650	17 600				4
4.5	16 150	16 250	16 450			4.5
5	14 800	14 950	15 150			5
6	12 650	12 750	12 950	13 100		6
7	10 150	10 300	10 550	10 650	9 900	7
8	7 900	8 100	8 350	8 450	8 500	8
9	6 300	6 500	6 750	6 900	6 950	9
10		5 350	5 600	5 750	5 800	10
12			3 950	4 100	4 200	12
14				3 000	3 050	14
16				2 200	2 300	16
18					1 700	18

On Tires – Pick & Carry (Creep) – Boom Centered Over Front
(All Capacities Are Listed In Kilograms)

Radius (m)	Boom Length (m)					Radius (m)
	10.82	12.2	15.2	18.3	21.3	
3	20 250					3
3.5	18 000	17 950				3.5
4	16 200	16 300				4
4.5	14 600	14 750	14 900			4.5
5	13 250	13 400	13 550			5
6	11 050	11 200	11 400	11 500		6
7	9 350	9 500	9 700	9 850	9 900	7
8	7 900	8 100	8 350	8 450	8 500	8
9	6 300	6 500	6 750	6 900	6 950	9
10		5 350	5 600	5 750	5 800	10
12			3 950	4 100	4 200	12
14				3 000	3 050	14
16				2 200	2 300	16
18					1 700	18

This information is not for crane operation. Operator must refer to the in–cab information for crane operation. Rated lifting capacities shown on fully extended outriggers do not exceed 75% of the tipping loads and on tires do not exceed 65% of the tipping loads.

On Tires – Stationary – 360° Rotation (All Capacities Are Listed In Kilograms)						
Radius (m)	Boom Length (m)					Radius (m)
	10.82	12.2	15.2	18.3	21.3	
3	17 100					3
3.5	14 750	14 900				3.5
4	11 850	12 000				4
4.5	9 700	9 850	10 050			4.5
5	8 100	8 250	8 450			5
6	5 850	6 000	6 200	6 350		6
7	4 400	4 550	4 750	4 900	4 950	7
8	3 300	3 450	3 700	3 800	3 900	8
9	2 500	2 650	2 900	3 050	3 100	9
10		2 050	2 300	2 400	2 500	10
12			1 400	1 500	1 600	12
14					1 000	14

Fly Attachment Lift Capacity Charts – Optional (Metric)

Fully Extended Outriggers – 360° Rotation (All Capacities Are Listed In Kilograms)								
33.53m Main Boom Length 2° Fly Offset			33.53m Main Boom Length 20° Fly Offset			33.53m Main Boom Length 40° Fly Offset		
Radius (m)	Fly Length (m)		Radius (m)	Fly Length (m)		Radius (m)	Fly Length (m)	
	8.69	15.54		8.69	15.54		8.69	15.54
12	4 250		14	4 250		16	3 350	
14	4 250	2 800	16	4 000		18	3 250	
16	4 250	2 800	18	3 600	2 200	20	3 100	
18	3 900	2 800	20	3 300	2 100	22	2 850	1 600
20	3 550	2 700	22	3 000	1 950	24	2 650	1 550
22	3 050	2 500	24	2 750	1 850	26	2 400	1 500
24	2 550	2 250	26	2 300	1 800	28	2 000	1 450
26	2 100	2 050	28	1 900	1 700	30	1 650	1 400
28	1 750	1 900	30	1 550	1 650	32	1 350	1 400
30	1 450	1 650	32	1 250	1 500	34	1 050	1 350
32	1 150	1 350	34	1 000	1 300	36		1 200
34	950	1 150	36	800	1 100	38		950
36		950	38		900	40		750

This information is not for crane operation. Operator must refer to the in–cab information for crane operation. Rated lifting capacities shown on fully extended outriggers do not exceed 75% of the tipping loads and on tires do not exceed 65% of the tipping loads.

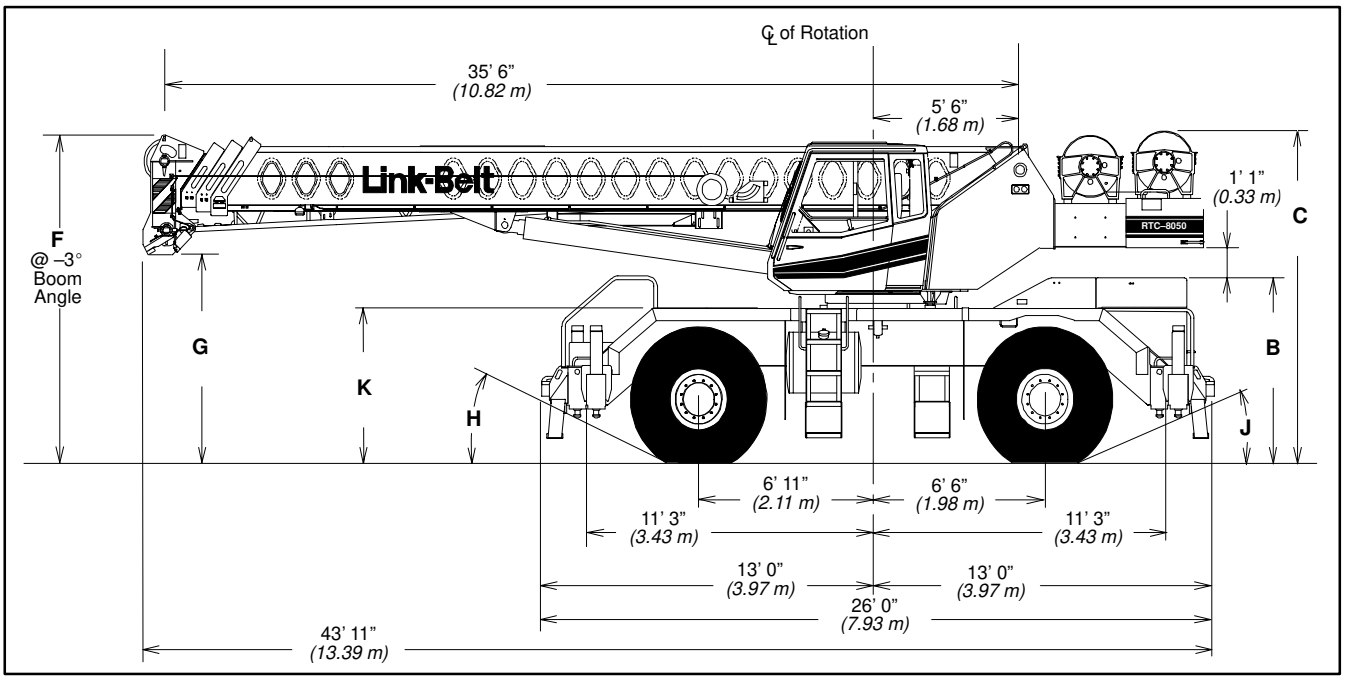
Link-Belt Construction Equipment Company Lexington, Kentucky www.linkbelt.com

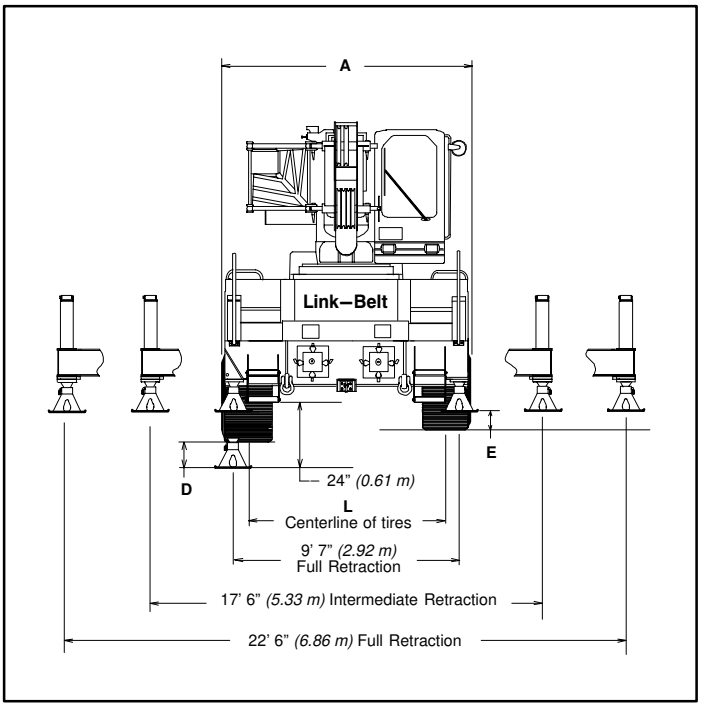
Specifications

Telescopic Boom Rough Terrain Crane

RTC–8050 **50–ton** *(45.36 metric ton)*

Series II





General Dimensions	feet	*metric*
Turning Radius (4–wheel steer –centerline of tires	20'	6.09
Turning Radius (2–wheel steer –centerline of tires	36'	*10.97*
Turning Radius (4–wheel steer – outside front carrier corner	23' 4"	*7.11*
Turning Radius (2–wheel steer – outside front carrier corner	39' 0"	*11.89*
Tailswing of counterweight	12' 10"	*3.90*

	Tire Size	
Dimension	**23.5 x 25**	**23.5 R 25**
A	10' 3.5" *(3.14 m)*	10' 3" *(3.12 m)*
B	6' 7.75" *(2.03 m)*	6' 9.5" *(2.06 m)*
C	11' 11.75" *(3.65 m)*	12' 1.5" *(3.70 m)*
D	7.75" *(0.20 m)*	7" *(0.18 m)*
E	10" *(0.25 m)*	11.75" *(0.30 m)*
F	10' 0.25" *(3.05 m)*	10' 2" *(3.10 m))*
G	7' 6" *(2.29 m)*	7' 7.75" *(2.33 m*
H	24°	24.8°
J	21°	22°
K	6' 6.75" *(1.69 m)*	6' 8.5" *(1.74 m)*
L	8' 3" *(2.51 m)*	8' 3" *(2.51 m)*

Upper Structure

■ 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.

Standard Boom
- 35.5' – 110' *(10.82 – 33.53 m)* four–section full power boom.
  - Basic mode (or mode 'B') is the full power, synchronized mode of telescoping all sections proportionally.
  - The exclusive ***A–max*** mode (or mode 'A') extends only the inner mid–section to 60.3' *(18.38 m)* offering increased capacities for in–close, maximum capacity picks.
  - Mechanical Boom Angle Indicator

Boom Head
- Four 16.5" *(0.42 m)* root diameter nylon sheaves handle up to eight parts of wire rope
- Quick–reeve design
- Rope dead end lugs provided on each side of boom head
- Easily removable wire rope guards
- Fly pinning alignment tool

Boom Elevation
- One Link–Belt designed hydraulic cylinder with holding valve and bushing in each end.
- Hand control for controlling boom elevation from –3° to 78°.

Optional Auxiliary Lifting Sheave
- Single 16.5" *(0.42 m)* root diameter nylon sheave with removable wire rope guard.
- Use with one or two parts of line.
- Does not affect erection of fly or use of main head sheaves for multiple reeving.

Optional
- 60–ton *(54.43 mt)* 4–sheave, quick reeve™ hook block
- 40–ton *(36.29 mt)* 4–sheave, quick reeve™ hook block
- 8.5–ton *(7.7 mt)* hook ball (swivel or non–swivel)
- Boom floodlight

■ Fly

Optional
- 28.5' *(8.69 m)* One–piece lattice fly, stowable, offsettable to 2°, 20° or 40°.
- Lugs to allow for second section.
- 28.5' – 51' *(8.69 – 15.54 m)* Two–piece (bifold) stowable, offsettable to 2°, 20° or 40°.

■ Cab and Controls

Environmental ULTRA CAB™
- LCF–2000 construction process featuring laminated fibrous composite material.
- Isolated from sound with acoustical vinyl insulation.
- Six–way adjustable operator's seat with retractable seat belt.
- Four–way adjustable tilting–telescoping and locking steering wheel.
- All windows are tinted and tempered safety glass.
- Slide by door opens to 3' *(0.91 m)* width.
- Sliding rear and right side windows and swing up roof window for maximum visibility and ventilation.
- Audible swing alarm
- Backup alarm
- 12–volt accessory outlet
- Electric windshield wiper
- Top hatch window wiper
- Fire extinguisher
- Windshield washer
- Warning horn
- Travel lights
- Sun screen
- Mirrors
- Cup holder
- Circulating fan

Optional
- Amber strobe light
- Emergency steering system
- Hot water cab heater
- Amber rotating beacon
- Air conditioning

Controls

Hydraulic controls (joystick type) for:
- Rear winch
- Optional front winch
- Drum rotation indicators
- Single–axis optional
- Hand–held outrigger controls and sight level bubble also provided in upper cab.
- Boom hoist
- Swing

Foot controls for:
- Boom telescope
- Swing brake
- Engine throttle with throttle lock

Cab Instrumentation

Corner–post mounted gauges with integral audio/visual warning system for:
- Tachometer
- Oil pressure
- Convertor temperature
- Hydraulic oil temperature
- Water temperature
- Voltmeter
- Fuel

■ Rated Capacity Limiter

- **Microguard 434** Graphic audio–visual warning system built into the cornerpost with anti–two block and function limiters.
- Anti–two block weight designed for quick reeve of hookblock.

Operating data available includes:
- Machine configuration
- Boom length
- Head height
- % of allowed load
- Actual load
- Boom angle
- Radius of load
- Allowed load

Presettable alarms include:
- Maximum and minimum boom angles.
- Maximum tip height.
- Maximum boom length.
- Swing left/right positions.
- Operator defined area alarm is standard.

Optional
- **Internal RCL light bar:** Visually informs operator when crane is approaching maximum load capacity with a series of green, yellow and red lights.
- **External RCL light bar:** Visually informs ground crew when crane is approaching maximum load capacity kickouts and presettable alarms with a series of three lights; green, yellow and red.

■ Swing

- Bi–directional hydraulic swing motor mounted to a planetary reducer for 360° continuous smooth swing at 2.8 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.
- **Swing lock** – Standard; two position travel lock operated from the operator's cab.
- **Counterweight** – 12,500 lbs. *(5 670 kg)* Bolted to upper structure frame.

Optional
- 360° pawl–in–gear swing lock (meets New York City requirements).

■ Hydraulic System

Main Pump
- Three–section gear–type pump.
- Combined pump capacity 117 gpm *(443 lpm)*
- Mounted on transmission converter, powered by engine through a pump disconnect.
- Pump disconnect is a spline–type clutch engaged/disengaged from carrier.
- Pump operates at 3,500 p.s.i. *(24.1 MPa)* maximum system pressure.
- O–Ring Face Seal (ORFS) technology throughout with hydraulic oil cooler.

Telescope / Outrigger / Steering Pump –
- Single gear–type pump, 22 gpm *(83 lpm)* maximum. Mounted on transmission, powered by engine through a direct mechanical drive.
- Pump operates at 3,000 p.s.i. *(20.7 MPa)* maximum system pressure.

Reservoir
- 140 gal. *(303 L)* capacity. Diffuser for deaeration.

Filtration:
- One 10–micron filter located inside hydraulic reservoir.
- Accessible for easy replacement.

Control Valves:
- Five separate, pilot operated control valves allow simultaneous operation of all crane functions.
- Winch control valves are pressure compensated for improved metering.

■ Load Hoist System

Standard
- 2M rear winch with grooved lagging.
- Two–speed motor and automatic brake.
- Power up/down mode of operation.
- Controls for future addition of front winch.
- Bi–directional gear–type hydraulic motor, driven through a planetary reduction unit for positive operator control under all load conditions.
- Asynchronous parallel double crossover grooved drums minimize rope harmonic motion.
- Rotation resistant wire rope.

Line Pulls and Speeds
- Maximum line pull 15,390 lbs. *(6 980 kg)* and maximum line speed of 455 f.p.m. *(139 m/min)* on standard 16" *(0.41 m)* root diameter grooved drum.

Optional
- 2M front winch with two–speed motor, automatic brake, grooved lagging and power up/down mode of operation.
- Hoist drum cable followers.
- Third wrap indicators.

Carrier

■ Type
- 10' 6" *(3.20 m)* wide, 161" *(4.09 m)* wheelbase.
- 4 x 4 x 4 – (4–wheel steer, 4–wheel drive) For rough terrain with limited turning area.

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

Standard Carrier Equipment
- Two front, two rear, and two mid–point carrier steps
- Non–slip safety strips on carrier deck
- Deep front storage unit
- Full deck fenders
- Pontoon storage
- Full lighting package
- Front towing shackles
- Hook block tie back

Optional
- Front and rear mounted pintle hook

■ Engine

Engine	Cummins 6BT 5.9 L
Cylinders – cycle	6 – 4
Bore	4.02 in. *(102.11 mm)*
Stroke	4.72 in. *(119.89 mm)*
Displacement	359 cu. in. *(5.9 L)*
Maximum brake hp	185 @ 2,500 rpm
Peak torque (ft. lb.)	553 @ 1,500 rpm
Electric system	12 volt
Starting system	12 volt
Fuel capacity	75 gallons *(283.9 L)*
Alternator	130 amps
Crankcase capacity (total system)	17.2 qts. *(16.3 L)*

- Water/fuel separator on engine
- 110–volt block heater
- Ether injection package – optional

■ Transmission
- Funk DF–150 power shift transmission with eight speeds forward and four reverse.
- Rear axle disconnect for two or four–wheel drive.
- LCD indicator providing gear and diagnostic information.

■ Axles

Front and Rear Axles
- Heavy duty planetary drive/steer type

■ Suspension

Front Axle
- Rigid mounted to frame

Rear Axle
- Fully independent 4–Link
- Automatic axle oscillation lockout cylinders engage when upper structure rotates past 2.5° of centerline

Optional
- Rear Hydro–gas Ride™

■ Steering
- Hydraulic front–wheel, rear–wheel, four–wheel and "crab" steering
- Modes selected by rotary switch on overhead console.
- All modes are fully coordinated and controlled by steering wheel.

Optional
- Rear steer indicator

■ Tires

Front and Rear
- Standard 23.5 x 25 (20–PR) Earthmover type.

Optional
- 23.5R25 2 star radials
- Spare tires and rims

■ Brakes

Service
- Fully hydraulic disc–type brakes at each wheel end with independent front and rear system. Controlled by foot pedal in cab.

Parking/Emergency
- Spring applied, hydraulic released, cab controlled, wet, multiple disc–type integral to the transmission.

■ Outriggers
- Three position operation capability.
- Four hydraulic, telescoping beam and jack outriggers.
- Vertical jack cylinders equipped with integral holding valve.
- Beams extend to 22' 6" *(6.86 m)* centerline–to–centerline and retract to within 10' 6" *(3.20 m)* of the overall crane width.
- Equipped with stowable, lightweight 19" *(0.48 m)* square steel pontoons.
- Hand–held controls and sight level bubble located in upper structure cab.

Confined Area Lifting Capacities (CALC™) System
- Three operational outrigger configurations are available:
  - Full extension – 22' 6" *(6.86 m)*
  - Intermediate position – 17' 6" *(4.33 m)*
  - Full retraction – 9' 7" *(2.92 m)*
- For confined area operation, rated lifting capacities are provided for the intermediate and fully retracted outrigger positions.
- When the outrigger position levers (located on the outrigger beams) are engaged, the operator can set the crane in the intermediate or full retraction outrigger position without leaving the cab.

■ Travel Speeds and Gradability

Tires	23.5 x 25 (20–PR)
Maximum Speed	25 *(40.23 km/h)*
Gradability at stall	90%
Maximum Tractive Effort at Stall	53,765 lbs. *(24 387 kg)*
Gradability at 1.0 mph (1.6 km/hr)	60%
Maximum Tractive Effort at 1.0 mph. (1.6 km/hr)	34,250 lbs. @ 1,500 rpm *(15 536 kg)*

■ Axle Loads

Base machine with standard 35.5' – 110' *(10.82 – 33.53 m)* four–section boom, 2M main winch with 2–speed hoisting and power up/down, 600' *(182.88 m)* of 3/4" *(19 mm)* wire rope. 4x4x4 carrier with Cummins 6BTA5.9 engine, 23.5x25 tires, 75 gals. *(283.91 L)* of fuel, tow shackles and hook block tieback.	G.V.W. [1]		Upper facing front				Upper facing rear			
			Front axle		Rear axle		Front axle		Rear axle	
	lbs.	*kg.*	lbs.	*kg.*	lbs.	*kg.*	lbs.	*kg.*	lbs.	*kg.*
	72,430	*32 853*	34 013	*15 428*	38,417	*17 426*	31,307	*14 201*	38,106	*17 285*
Cold weather starting aids – ether injector	6	*3*	–2	*–0.9*	8	*4*	–2	*–0.9*	8	*4*
23.5R25 Tires	428	*194*	213	*97*	215	*98*	213	*97*	215	*98*
Pintle hook, front	13	*6*	18	*8*	–5	*–2*	18	*8*	–5	*–2*
Pintle hook, rear	13	*6*	–5	*–2*	18	*8*	–5	*–2*	18	*8*
Rear steer indicator	3	*1*	0	*0*	3	*1*	0	*0*	3	*1*
Hydro–gas Suspension	52	*24*	18	*8*	34	*15*	18	*8*	34	*15*
Winch roller – rear winch	93	*42*	–39	*–18*	132	*60*	129	*59*	–36	*–17*
Winch roller – front winch	93	*42*	–19	*–9*	112	*51*	109	*49*	–16	*–7*
2M Auxiliary Winch	19	*9*	–2	*–0.9*	21	*10*	21	*10*	–2	*–0.9*
600' *(182.88 m)* of 3/4" *(19 mm)* wire rope on auxiliary winch	669	*303*	–88	*–40*	757	*343*	734	*333*	–65	*–30*
Cab heater	50	*23*	25	*11*	25	*11*	23	*10*	27	*12*
Air conditioning in operator's cab	315	*143*	74	*34*	241	*109*	231	*105*	84	*38*
360 degree swing lock	76	*34*	28	*13*	48	*22*	45	*20*	31	*14*
Emergency steer system	136	*62*	15	*7*	121	*55*	116	*53*	20	*9*
Fly brackets to boom base sections for fly options	99	*45*	146	*66*	–47	*–21*	–51	*–23*	150	*68*
28.5' *(8.68 m)* fixed fly (stowed)	1,291	*585*	2,237	*1 015*	–947	*–430*	–990	*–449*	2,281	*1 035*
28.5' – 51' *(8.68 – 15.54 m)* offset fly (stowed)	1,861	*844*	3,060	*1 388*	–1,199	*–544*	–1,263	*–573*	3,124	*1,417*
Floodlight to boom base section	10	*5*	23	*10*	–13	*–6*	–13	*–6*	23	*10*
60–ton *(54.43 mt)* capacity hook block to front/rear bumper	1,109	*503*	1,530	*694*	–421	*–191*	–459	*–208*	1 568	*711*
40–ton *(36.29 mt)* capacity hook block to front/rear bumper	720	*327*	994	*451*	–274	*–124*	–298	*–135*	1,108	*462*
8.5–ton *(7.7 mt)* capacity hook block to front/rear bumper	360	*163*	497	*225*	–137	*–62*	–149	*–68*	509	*231*
Auxiliary lifting sheave	91	*41*	257	*117*	–166	*–75*	–169	*–77*	260	*118*

[1] – Adjust gross weight and axle loading according to component weight. Note: All weights are ± 3%.

Tire	**Max. Axle Load @ 25 mph *(40.23 km/hr)***
23.5 x 25 (20–PR)	38,800 *(17 600 kg)*
23.5R25 2 Star	38,800 *(17 600 kg)*

Link-Belt
CONSTRUCTION EQUIPMENT

Lifting Capacities

Telescopic Boom Rough Terrain Crane

RTC–8050

50–ton *(45.36 metric tons)*

Series II

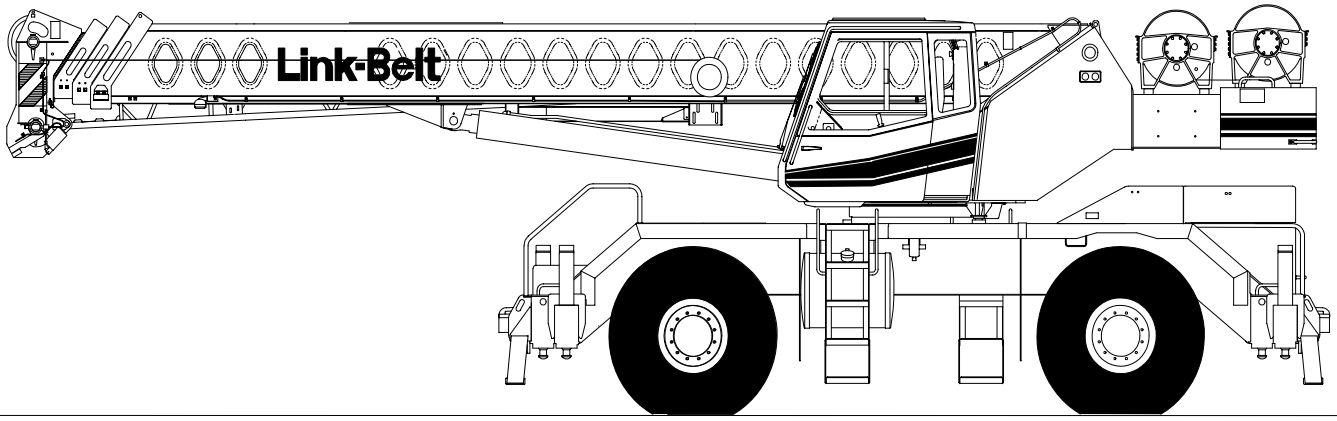
Boom and Fly Capacities for this machine are listed by the following sections.

Fully Extended Outriggers

- Working Range Diagram
- 35.5’ to 60.3’ *(10.82 – 18.38 m)* Main Boom Capacities, “A–max” Mode
- 35.5’ to 110’ *(10.82 – 33.53 m)* Main Boom Capacities, Basic Mode “B”
- 28.5’ *(8.69 m)* One–piece Fly Capacities, Basic Mode “B”
- 28.5’ to 51’ *(8.69 – 15.54 m)* Two–piece Fly Capacities, Basic Mode “B”

On Tires

- Working Range Diagram
- 35.5’ to 60.3’ *(10.82 – 18.38 m)* Main Boom Capacities, “A–max” Mode
- 35.5’ to 70’ *(10.82 – 21.34 m)* Main Boom Capacities, Basic Mode “B”



CAUTION: This material is supplied for reference use only. Operator must refer to in–cab Crane Rating Manual to determine allowable machine lifting capacities and operating procedures.

Litho in U.S.A. 3/01

#6304 (Supersedes #6278)

⚠ WARNING

READ AND UNDERSTAND THE OPERATOR'S AND SAFETY MANUALS AND THE FOLLOWING INSTRUCTIONS AND RATED LIFTING CAPACITIES BEFORE OPERATING CRANE. OPERATION WHICH DOES NOT FOLLOW THESE INSTRUCTIONS MAY RESULT IN AN ACCIDENT

OPERATING INSTRUCTIONS

GENERAL:

1. 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.
2. 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.
3. 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:

1. 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.
2. 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.
3. When operating on tires over the side, do not exceed 71° maximum boom angle. Loss of backward stability will occur causing a backward tipping condition.
4. When making lifts on tires, they must be inflated to the recommended pressure. (See Operation note 20 and Tire Inflation.)
5. For required parts of line, see Wire Rope Capacity and Winch Performance.
6. Before setting up on intermediate outriggers, retracted outriggers, or tires, refer to Working Range Diagrams and rated lifting capacities to determine allowable crane configurations.

OPERATION:

1. Rated lifting capacities at rated radii 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 6000 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 6000 pounds or 80% of rated lifting capacity, whichever is less. For clamshell and magnet operation, maximum boom length is restricted to 50 feet and the boom angle is restricted to a minimum of 35 degrees. Lifts with any fly erected are prohibited for both clam and magnet operation.
2. 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.
3. 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. Rated lifting capacities in the 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 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 that can be lifted. Rated lifting capacities include the deduct for either fly stowed on the base of the boom. For deducts of either fly erected, but not used, see Capacity Deductions For Auxiliary Load Handling Equipment.
5. 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.
6. Rated lifting capacities are for lift crane service only.
7. 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 that 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.
11. Shock loading the boom shall be avoided. However, in cold weather, if it is believed that shock loads may occur, rated capacities should be reduced by the following rule: a 1% reduction in rated capacities should be taken for each 1°F below 0°F.
12. When making lifts with auxiliary head machinery, the effective length of the boom increases by 2 feet.
13. 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.
14. 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 110 ft. and greater than 90 ft., the rated loads are determined by the boom angle using the 110 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 90 ft. the rated loads are determined by the boom angle only using the 90 ft. boom and fly chart. For angles not shown, use the next lower boom angle to determine the rated capacity.
19. The 35.5 ft. boom length structural capacities are based on boom fully retracted. If the boom is not fully retracted, do not exceed capacities shown for the 40 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. Pick and carry operations are restricted to speed of 2.5 mph and creep . The boom must be centered over the front of the crane with two–position travel swing lock engaged and the load must be restrained from swinging. Lifts with any fly erected on tires are prohibited. For correct tire pressure, see Tire Inflation.

DEFINITIONS:

1. 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.
2. Loaded Boom Angle: ∠° The angle between the boom base section and horizontal with freely suspended load at the rated radius.
3. Working Area: Area measured in a circular arc about the center line of rotation as shown on the Working Area Diagram.
4. 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.
6. 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.
7. Load Factor: Load applied at the boom tip which gives the same moment effect as the boom mass.
8. Creep: Crane movement limited to 200 ft. in a 30 minute period and not to exceed 1 mph maximum speed.

TIRE INFLATION

Tire Size	Operation	Tire Pressure (psi)
20.5 X 25 24 Ply Rating	Stationary	85
	Creep	85
	2.5 m.p.h.	85
20.5R25 2 Star Rating	Stationary	102
	Creep	102
	2.5 m.p.h.	102

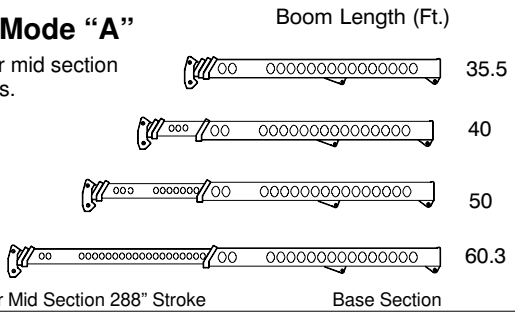
PONTOON LOADINGS

Maximum Pontoon Load	Maximum Pontoon Ground Bearing Pressure:
63,500 lb	213 psi

BOOM MODES

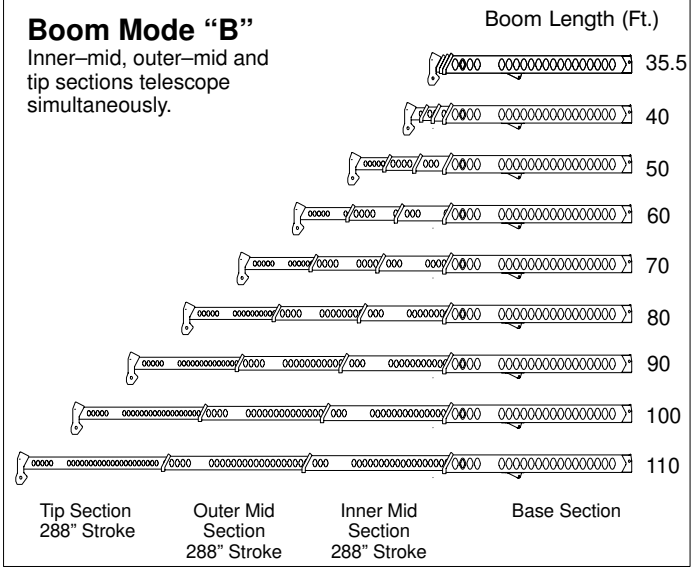
Boom Mode "A"

Only inner mid section telescopes.



Boom Mode "B"

Inner–mid, outer–mid and tip sections telescope simultaneously.



WIND SPEED RESTRICTIONS

If The Wind Speed Exceeds:	Rated Lifted Capacities Must Be Reduced By At Least:
20 MPH	40%
30 MPH	70%
40 MPH	Crane operation must be shutdown and the boom retracted and lowered to horizontal.

- Additional reductions are required for loads with large wind sail area.
- These restrictions are based on machine on fully extended outriggers.
- The operator shall add 10° to all minimum boom angles due to no load stability and shall not boom down below that angle.

WINCH PERFORMANCE

Winch Line Pulls			Drum Rope Capacity (Ft.)	
	Two Speed Winch			
Wire Rope Layer	Low Speed Available Lbs.*	High Speed Available Lbs.	Layer	Total
1	15,390	7,302	114	114
2	14,150	6,714	124	238
3	13,094	6,213	134	372
4	12,185	5,781	144	516
5	11,394	5,406	154	670

* Maximum lifting capacity:
Type RB Rope = 12,920 Type ZB Rope = 15,600

WIRE ROPE CAPACITY

Maximum Lifting Capacities Based On Wire Rope Strength			
Parts of Line	3/4" Type RB	3/4" Type ZB	Notes
1	12,920	15,600	Capacities shown are in pounds and working loads must not exceed the ratings on the capacity charts in the Crane Rating Manual. Study Operator's Manual for wire rope inspection procedures and single part of line application.
2	25,840	31,200	
3	38,760	46,800	
4	51,680	62,400	
5	64,600	78,000	
6	77,520	93,600	
7	90,440	109,200	
8	103,360	124,800	

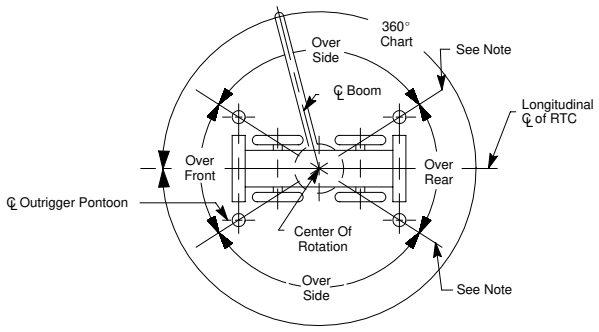
LBCE	DESCRIPTION
Type RB	18 x 19 Rotation Resistant – Compacted Strand – High Strength, Preformed, Right Regular Lay
Type ZB	36 x 7 Rotation Resistant – Extra Improved Plow Steel – Right Regular Lay

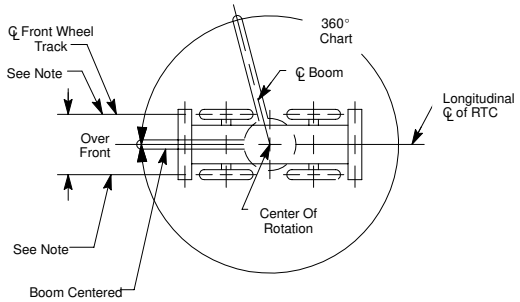
HYDRAULIC CIRCUIT PRESSURE SETTINGS

Function	Pressure (psi)
Front And Rear Winch	3,500
Outrigger	3,000
Boom Hoist	3,500
Telescope	3,000
Swing	1,500
Steering	2,500
Pilot Control	500

WORKING AREAS

RTC On Outriggers





RTC On Tires

Note: These Lines Determine The Limiting Position Of Any Load For Operation Within Working Areas Indicated.

CAPACITY DEDUCTIONS FOR AUXILIARY LOAD HANDLING EQUIPMENT

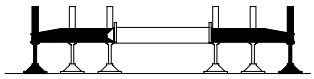
Load Handling Equipment	Weight (lbs)
Auxiliary Head Attached	100
40 Ton Quick Reeve 3 Sheave Hook Block (See Hook Block For Actual Weight)	720
60 Ton Quick Reeve 3 Sheave Hook Block (See Hook Block For Actual Weight)	1109
10 Ton Quick Reeve 3 Sheave Hook Block (See Hook Block For Actual Weight)	583
8.5 Ton Hook Ball (See Hook Ball For Actual Weight)	360

Lifting From Main Boom With:	
28.5 or 51 Ft. Fly Stowed on Boom Base (See operation note #4)	0
28.5 Ft. Offset Fly Erected But Not Used	3,200
51 Ft. Offset Fly Erected But Not Used	6,800

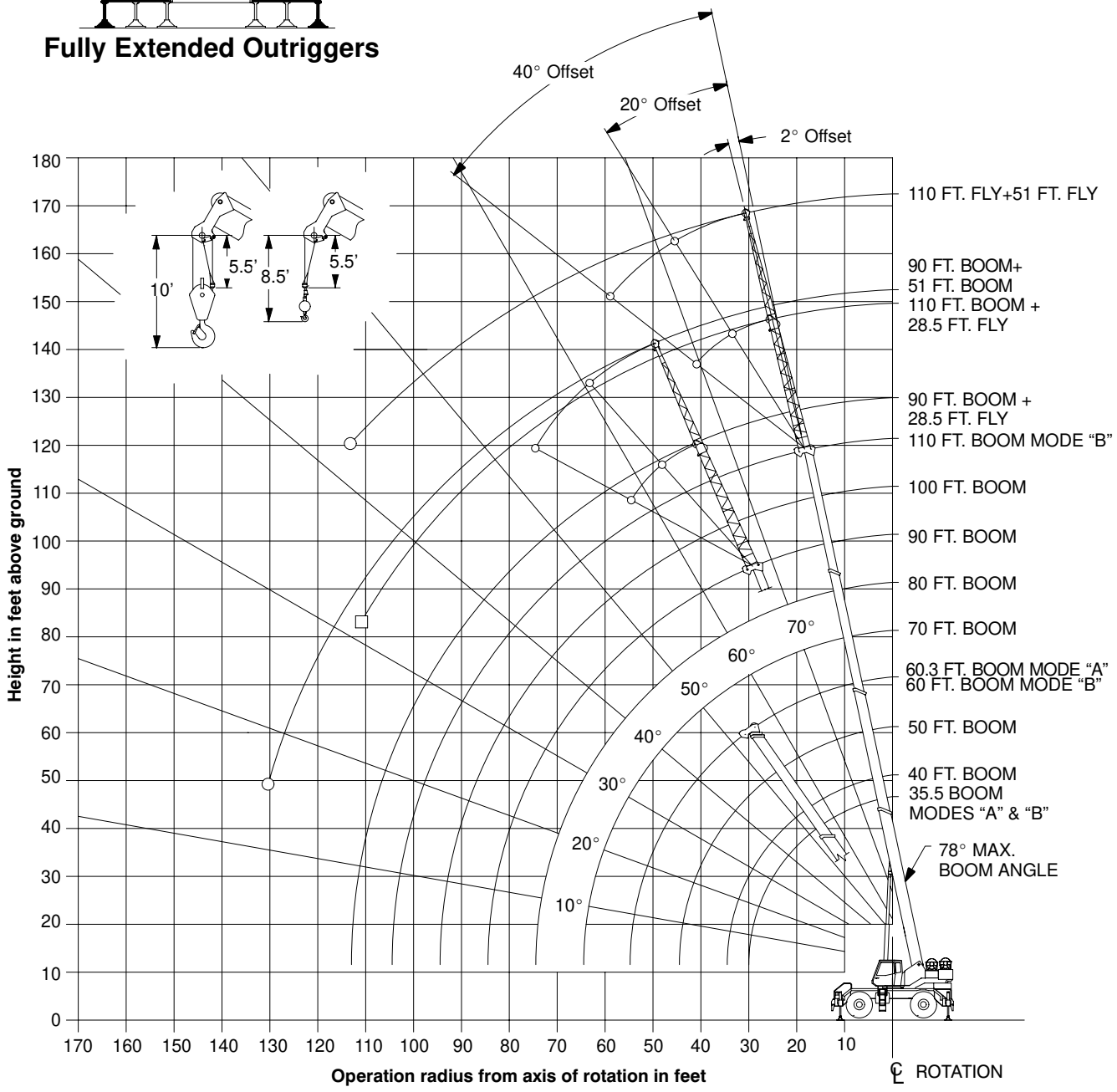
Lifting From 28.5 Ft. Offset Fly With:	
22.5 Ft. Fly Tip Erected But Not Used	**PROHIBITED**
22.5 Ft. Fly Tip Stowed On 28.5 Ft. Offset Fly	**PROHIBITED**

Note: Capacity deductions are for Link–Belt supplied equipment only.

WORKING RANGE DIAGRAM



Fully Extended Outriggers



◯ **Denotes Main Boom + 51 Ft. Offset Fly–Boom Mode "B"**

□ **Denotes Main Boom + 28.5 Ft. Offset Fly–Boom Mode "B"**

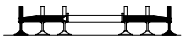
Note: Boom and fly geometry shown are for unloaded condition and crane standing level on firm supporting surface. Boom deflection, subsequent radius and boom angle change must be accounted for when applying load to hook.

⚠ WARNING

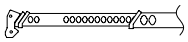
Do Not Lower The Boom Below The Minimum Boom Angle For No Load Stability As Shown In The Lift Charts For The Boom Lengths Given. Loss Of Stability Will Occur Causing A Tipping Condition.

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.

Rated Lifting Capacities In Pounds
Fully Extended Outriggers
See Set Up Note 2



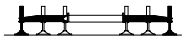
FULL



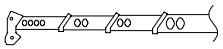
MAIN BOOM "A"

Load Radius (Ft.)	35.5 Ft.			40 Ft.		
	∡°	360°	Over Front	∡°	360°	Over Front
10	68.0	100,000	100,000	70.5	78,400	78,400
12	64.5	73,900	75,400	67.5	73,100	73,100
15	58.5	63,200	64,400	62.5	63,000	63,800
20	48.0	50,300	51,300	54.0	50,100	51,200
25	34.5	39,000	40,900	44.0	38,900	40,700
30				31.0	30,800	32,300
Min.Bm. Ang.Cap.	0 (30.0)	17,800	17,800	0 (34.5)	15,300	15,300
Load Radius (Ft.)	50 Ft.			60.3 Ft.		
	∡°	360°	Over Front	∡°	360°	Over Front
10	75.0	72,600	72,600			
12	72.5	65,600	65,600	76.5	50,900	50,900
15	69.0	57,500	57,500	73.5	46,900	46,900
20	62.5	47,600	47,600	68.5	39,200	39,200
25	55.5	38,500	40,200	63.0	33,400	33,400
30	48.0	30,500	32,100	57.5	28,700	28,700
35	39.0	24,800	26,100	51.0	24,600	25,200
40	27.5	19,100	20,400	44.0	18,900	20,200
45				36.0	14,900	16,000
50				26.0	11,800	12,800
Min.Bm. Ang.Cap.	0 (44.5)	10,100	10,100	0 (54.8)	6,500	6,500

Rated Lifting Capacities In Pounds
Fully Extended Outriggers
See Set Up Note 2

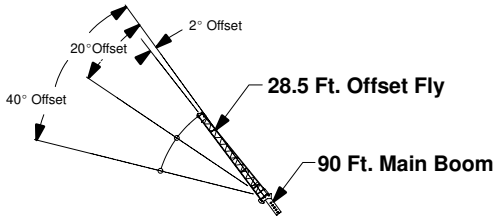


FULL



MAIN BOOM "B"

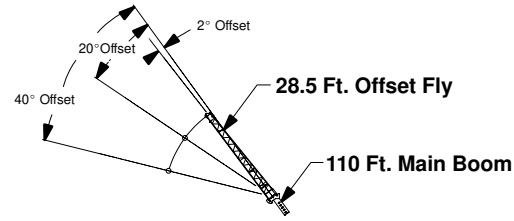
Load Radius (Ft.)	35.5 Ft.			40 Ft.			50 Ft.		
	∡°	360°	Over Front	∡°	360°	Over Front	∡°	360°	Over Front
10	68.0	100,000	100,000	70.5	37,900	37,900	74.5	37,900	37,900
12	64.5	73,900	75,400	67.5	37,900	37,900	72.5	37,900	37,900
15	58.5	63,200	64,400	62.5	37,900	37,900	69.0	37,900	37,900
20	48.0	50,300	51,300	54.0	37,900	37,900	62.5	37,900	37,900
25	34.5	39,000	40,900	44.0	37,900	37,900	55.5	37,900	37,900
30				31.0	31,300	32,900	48.0	31,900	33,500
35							39.0	26,100	27,500
40							27.5	20,800	22,100
Min.Bm Ang Cap	0 (30.0)	17,800	17,800	0 (34.5)	14,700	14,700	0 (44.5)	9,900	9,900
Load Radius (Ft.)	60 Ft.			70 Ft.			80 Ft.		
	∡°	360°	Over Front	∡°	360°	Over Front	∡°	360°	Over Front
10	77.5	37,900	37,900						
12	76.0	37,900	37,900	78.0*	37,900	37,900			
15	73.0	37,900	37,900	76.0	37,900	37,900	78.0*	35,400	35,400
20	68.0	37,900	37,900	72.0	37,900	37,900	74.5	34,700	34,700
25	62.5	37,900	37,900	67.5	37,900	37,900	71.0	34,200	34,200
30	56.5	32,300	33,900	62.5	32,500	32,800	67.0	30,300	30,300
35	50.5	26,500	27,800	57.5	26,700	28,100	63.0	26,900	27,200
40	43.5	21,200	22,500	52.5	21,400	22,700	58.5	21,500	22,800
45	35.5	17,100	18,200	46.5	17,300	18,400	54.0	17,400	18,500
50	25.0	13,900	14,900	40.5	14,200	15,200	49.0	14,300	15,300
55				33.0	11,900	12,700	44.0	12,100	12,800
60				23.5	10,000	10,700	38.0	10,200	10,900
65							31.0	8,600	9,300
70							22.0	7,300	7,900
MinBm Ang Cap	0 (54.5)	7,000	7,000	0 (64.5)	5,000	5,000	0 (74.5)	3,500	3,500
Load Radius (Ft.)	90 Ft.			100 Ft.			110 Ft.		
	∡°	360°	Over Front	∡°	360°	Over Front	∡°	360°	Over Front
20	77.0	28,900	28,900						
25	74.0	28,200	28,200	76.0	24,000	24,000	77.5	19,500	19,500
30	70.5	24,800	24,800	73.0	22,500	22,500	75.0	19,500	19,500
35	67.0	22,000	22,000	70.0	19,900	19,900	72.5	18,300	18,300
40	63.5	19,700	19,700	67.0	17,800	17,800	70.0	16,400	16,400
45	59.5	17,500	17,800	63.5	15,900	15,900	67.0	14,600	14,600
50	55.5	14,400	15,400	60.5	14,400	14,400	64.0	13,200	13,200
55	51.0	12,200	12,900	56.5	12,200	13,000	61.0	12,100	12,100
60	46.5	10,300	11,000	53.0	10,300	11,100	57.5	10,400	11,000
65	41.5	8,700	9,400	49.0	8,800	9,500	54.0	8,900	9,600
70	36.0	7,500	8,100	44.5	7,500	8,200	50.5	7,600	8,200
75	29.5	6,400	6,900	40.0	6,500	7,100	47.0	6,500	7,100
80	21.0	5,400	6,000	34.5	5,500	6,100	42.5	5,600	6,200
85				28.5	4,700	5,200	38.5	4,800	5,300
90				20.5	4,000	4,500	33.5	4,100	4,600
95							27.5	3,500	3,900
100							20.0	2,900	3,400
MinBm Ang Cap	0 (84.5)	2,400	2,400	0 (94.5)	1,600	1,600	0 (104.5)	900	900



Rated Lifting Capacities In Pounds
Fully Extended Outriggers
See Set Up Note 2

FULL

Load Radius (Ft.)	2° Offset ∠°	2° Offset 360°	20° Offset ∠°	20° Offset 360°	40° Offset ∠°	40° Offset 360°
30	77.0	16,700				
35	74.5	14,200				
40	72.0	13,400	75.5	10,500		
45	69.5	12,700	73.0	10,100	76.5	7,900
50	67.0	12,100	70.5	9,600	73.5	7,600
55	64.5	11,500	68.0	9,100	71.0	7,400
60	61.5	10,600	65.0	8,700	68.0	7,200
65	58.5	9,700	62.0	8,300	65.0	7,000
70	55.0	8,400	59.0	8,000	62.0	6,800
75	52.0	7,300	56.0	7,700	58.5	6,700
80	48.5	6,400	52.5	6,800	55.0	6,600
85	44.5	5,500	48.5	5,900	51.0	6,100
90	40.5	4,800	44.0	5,100	46.5	5,300
95	36.0	4,200	39.5	4,400	41.0	4,500
100	31.0	3,600	34.5	3,800		
105	25.0	3,200	28.0	3,300		
110	16.5	2,700				
Min.Bm. Ang./Cap.	0	700	0	800	0	900



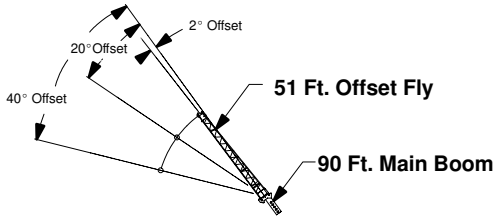
Rated Lifting Capacities In Pounds
Fully Extended Outriggers
See Set Up Note 2

FULL

Load Radius (Ft.)	2° Offset ∠°	2° Offset 360°	20° Offset ∠°	20° Offset 360°	40° Offset ∠°	40° Offset 360°
35	77.0	9,400				
40	75.5	9,400				
45	73.5	9,400	77.0	9,500		
50	71.5	9,400	75.0	9,100	78.0*	7,500
55	69.5	9,200	73.0	8,400	76.0	7,300
60	67.5	8,500	70.5	7,800	73.5	7,100
65	65.0	7,900	68.5	7,300	71.0	6,900
70	62.5	7,300	66.0	6,800	68.5	6,500
75	60.0	6,800	63.5	6,400	66.0	6,100
80	57.5	6,200	61.0	6,000	63.5	5,800
85	54.5	5,300	58.0	5,700	60.5	5,500
90	51.5	4,600	55.0	5,000	57.5	5,200
95	48.5	4,000	52.0	4,300	54.5	4,600
100	45.5	3,500	48.5	3,700	50.5	3,900
105	42.0	3,000	45.0	3,200	47.0	3,300
110	38.0	2,500	41.0	2,700	42.5	2,800
115	34.0	2,100	37.0	2,300		

⚠ WARNING

Do Not Lower 28.5 Ft. Offset Fly In Working Position Below 31.5° Main Boom Angle Unless Main Boom Length Is 98 Ft. Or Less, Since Loss Of Stability Will Occur Causing A Tipping Condition.



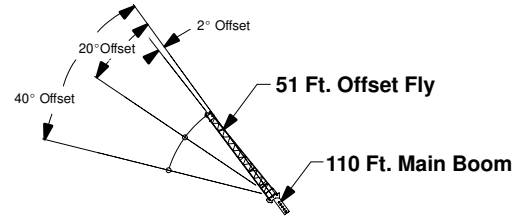
Rated Lifting Capacities In Pounds
Fully Extended Outriggers
See Set Up Note 2

FULL

Load Radius (Ft.)	2° Offset ∠°	2° Offset 360°	20° Offset ∠°	20° Offset 360°	40° Offset ∠°	40° Offset 360°
35	78.0*	9,100				
40	76.0	8,600				
45	74.0	8,100				
50	72.0	7,500	78.0*	5,400		
55	70.0	7,000	75.5	5,100		
60	67.5	6,500	73.5	4,800		
65	65.5	6,100	71.5	4,600	77.0	3,600
70	63.0	5,700	69.0	4,400	74.5	3,500
75	61.0	5,400	66.5	4,200	72.0	3,400
80	58.5	5,000	64.0	4,000	69.5	3,300
85	56.0	4,800	61.5	3,800	66.5	3,300
90	53.0	4,500	59.0	3,700	64.0	3,200
95	50.5	4,300	56.0	3,600	61.0	3,100
100	47.5	4,100	53.0	3,500	57.5	3,100
105	44.5	3,700	50.0	3,300	54.0	3,100
110	41.0	3,300	46.5	3,300	50.0	3,000
115	37.0	2,900	43.0	3,200	46.0	3,000
120	33.0	2,500	38.5	2,800	40.5	2,900
125	28.0	2,200	33.0	2,400		
130	22.0	1,900	26.0	2,000		

⚠ WARNING

Do Not Lower 51 Ft. Offset Fly In Working Position Below 15.5° Main Boom Angle Unless Main Boom Length Is 89 Ft. Or Less, Since Loss Of Stability Will Occur Causing A Tipping Condition.



Rated Lifting Capacities In Pounds
Fully Extended Outriggers
See Set Up Note 2

FULL

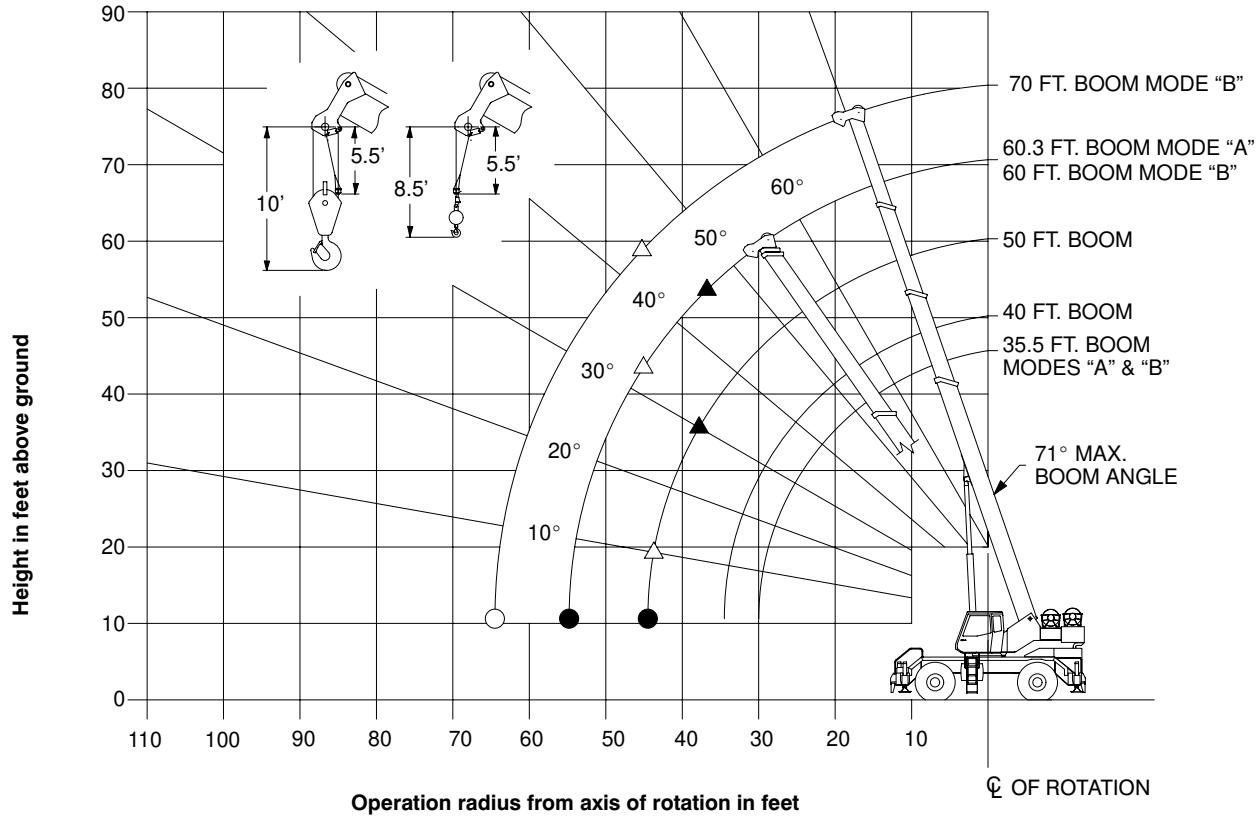
Load Radius (Ft.)	2° Offset ∠°	2° Offset 360°	20° Offset ∠°	20° Offset 360°	40° Offset ∠°	40° Offset 360°
45	77.0	6,200				
50	75.5	6,200				
55	74.0	6,200				
60	72.5	6,200	77.5	4,800		
65	70.5	6,000	75.5	4,600		
70	68.5	5,700	73.5	4,400		
75	66.5	5,300	72.0	4,300	76.5	3,400
80	64.5	4,900	70.0	4,100	74.5	3,400
85	62.5	4,600	68.0	4,000	72.5	3,300
90	60.5	4,300	66.0	3,800	70.0	3,200
95	58.5	4,000	63.5	3,700	68.0	3,200
100	56.0	3,800	61.5	3,500	65.5	3,100
105	53.5	3,500	59.0	3,300	63.0	3,100
110	51.0	3,000	56.5	3,200	60.5	3,000
115	48.5	2,600	54.0	3,000	57.5	2,900
120	45.5	2,200	51.0	2,600	54.5	2,800
125			47.5	2,200	51.0	2,400
130			44.5	1,900	47.0	2,000

⚠ WARNING

Do Not Lower 51 Ft. Offset Fly In Working Position Below 42.5° Main Boom Angle Unless Main Boom Length Is 89 Ft. Or Less, Since Loss Of Stability Will Occur Causing A Tipping Condition.

WORKING RANGE DIAGRAM

ON TIRES



Crane Configurations Prohibited:
Boom Lengths Greater than 71 FT.
28.5 FT. Offset Fly
51 FT. Offset Fly

- ▲ **Denotes Main Boom 360° – Boom Mode "A"**
- △ **Denotes Main Boom 360° – Boom Mode "B"**
- ● **Denotes Main Boom Between Tire Tracks Or Centered Over Front – Boom Mode "A"**
- ○ **Denotes Main Boom Between Tire Tracks Or Centered Over Front – Boom Mode "B"**

Note: Boom geometry shown is 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.

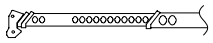
⚠ WARNING

Do Not Lower The Boom Below The Minimum Boom Angle For No Load Stability Or Raise Boom Above 71° As Shown In The Lift Charts For The Boom Lengths Given. 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. ( ) Reference Radius For Minimum Boom Angle Capacities (Shown In Parenthesis) Are In Feet.

On Tire Capacities In Pounds
Tire Pressure: See Page 5
Stationary Capacities
Over Front Between Tire Tracks
See Operation Note 20

ON TIRES

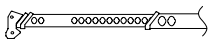


MAIN BOOM "A"

Load Radius (Ft.)	35 Ft.		40 Ft.	
	∠°	Load	∠°	Load
10	68.0	47,300	70.5	47,100
12	64.0	41,600	67.5	41,400
15	58.5	35,100	62.5	35,000
20	48.0	27,400	54.0	27,300
25	34.5	21,900	43.5	21,700
30			31.0	15,500
Min.Bm. Ang./Cap.	0 (30.0)	15,500	0 (34.5)	11,700
Load Radius (Ft.)	**50 Ft.**		**60.3 Ft.**	
	∠°	Load	∠°	Load
15	68.5	34,600		
20	62.5	27,000	68.0	26,800
25	55.5	21,400	62.5	21,200
30	47.5	15,300	56.5	15,100
35	39.0	11,300	50.5	11,100
40	27.5	8,400	43.5	8,300
45			36.0	6,200
50			25.5	4,600
Min.Bm. Ang./Cap.	0 (44.5)	6,400	0 (54.8)	3,300

On Tire Capacities In Pounds
Tire Pressure: See Page 5
Pick & Carry Capacities
Boom Centered Over Front.
See Operation Note 20

ON TIRES

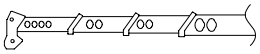


MAIN BOOM "A"

Load Radius (Ft.)	35.5 Ft.			40 Ft.		
	∠°	Creep	2.5 mph	∠°	Creep	2.5 mph
10	68.0	44,100	38,800	70.5	43,900	38,600
12	64.0	38,400	33,600	67.5	38,200	33,500
15	58.5	31,800	27,600	62.5	31,600	27,500
20	48.0	24,000	20,700	54.0	23,900	20,500
25	34.5	18,600	15,800	43.5	18,500	15,700
30				31.0	14,600	12,200
Min.Bm. Ang./Cap.	0 30.0	14,600	12,200	0 34.5	11,700	9,700
Load Radius (Ft.)	**50 Ft.**			**60.3 Ft.**		
	∠°	Creep	mph	∠°	Creep	2.5 mph
15	68.5	31,300	27,200			
20	62.0	23,600	20,300	68.0	23,400	20,100
25	55.5	18,300	15,500	62.5	18,100	15,300
30	47.5	14,400	12,100	56.5	14,300	11,900
35	39.0	11,300	9,400	50.5	11,100	9,300
40	27.5	8,400	7,300	43.5	8,300	7,200
45				36.0	6,200	5,500
50				25.5	4,600	4,100
Min.Bm. Ang./Cap.	0 44.5	6,400	5,700	0 54.8	3,300	2,900

On Tire Capacities In Pounds
Tire Pressure: See Page 5
Stationary Capacities
Over Front Between Tire Tracks
See Operation Note 20

ON TIRES

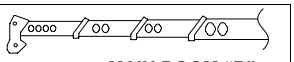


MAIN BOOM "B"

Load Radius (Ft.)	35.5 Ft.		40 Ft.		50 Ft.	
	∠°	Load	∠°	Load	∠°	Load
10	68.0	47,300	70.5	37,900		
12	64.0	41,600	67.5	37,900		
15	58.5	35,100	62.5	35,400	68.5	35,800
20	48.0	27,400	54.0	27,800	62.0	28,200
25	34.5	21,900	43.5	22,300	55.5	22,900
30			31.0	16,100	47.5	16,700
35					38.5	12,600
40					27.5	9,700
Min.Bm. Ang./Cap.	0 (30.0)	15,500	0 (34.5)	12,200	0 (44.5)	7,700
Load Radius (Ft.)	**60 Ft.**		**70 Ft.**			
	∠°	Load	∠°	Load		
20	67.5	28,500				
25	62.0	23,200	67.0	23,400		
30	56.5	17,100	62.0	17,200		
35	50.0	12,900	57.0	13,100		
40	43.0	10,100	52.0	10,300		
45	35.0	7,900	46.0	8,200		
50	25.0	6,300	40.0	6,500		
55			32.5	5,200		
60			23.0	4,200		
Min.Bm. Ang./Cap.	0 (54.5)	5,000	0 (64.5)	3,300		

On Tire Capacities In Pounds
Tire Pressure: See Page 5
Pick & Carry Capacities
Boom Centered Over Front.
See Operation Note 20

ON TIRES

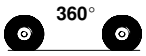


MAIN BOOM "B"

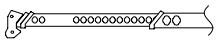
Load Radius (Ft.)	35.5 Ft.			40 Ft.			50 Ft.		
	∠°	Creep	2.5 mph	∠°	Creep	2.5 mph	∠°	Creep	2.5 mph
10	68.0	44,100	38,800	70.5	37,900	37,900			
12	64.0	38,400	33,600	67.5	37,900	33,900			
15	58.5	31,800	27,600	62.5	32,000	27,900	68.5	32,400	28,300
20	48.0	24,000	20,700	53.5	24,300	21,000	62.0	24,700	21,400
25	34.5	18,600	15,800	43.5	19,000	16,200	55.0	19,500	16,700
30				31.0	15,100	12,700	47.5	15,600	13,200
35							38.5	12,600	10,600
40							27.5	9,700	8,500
Min.Bm Ang/ Cap	0 (30.0)	14,600	12,200	0 (34.5)	12,200	10,200	0 (44.5)	7,700	6,900
Load Radius (Ft.)	**60 Ft.**			**70 Ft.**					
	∠°	Creep	2.5 mph	∠°	Creep	2.5 mph			
20	67.5	25,000	21,700						
25	62.0	19,800	16,900	66.5	19,900	17,100			
30	56.5	15,900	13,500	62.0	16,100	13,700			
35	50.0	12,900	10,900	57.0	13,100	11,200			
40	43.0	10,100	8,900	52.0	10,300	9,100			
45	35.0	7,900	7,200	46.0	8,200	7,400			
50	25.0	6,300	5,800	40.0	6,500	6,100			
55				32.5	5,200	4,900			
60				23.0	4,200	3,900			
Min.Bm. Ang./Cap.	0 (54.5)	5,000	4,700	0 (64.5)	3,300	3,200			

On Tire Capacities In Pounds
Tire Pressure: See Page 5
Stationary Capacities – 360 Degree
See Operation Note 20

360°



ON TIRES



MAIN BOOM "A"

Load Radius (Ft.)	35.5 Ft.		40 Ft.	
	∠°	Load	∠°	Load
10	68.0	37,200	70.5	36,900
12	64.0	31,100	67.5	30,900
15	58.5	24,000	62.5	23,800
20	48.0	14,500	53.5	14,300
25	34.5	9,400	43.5	9,300
30			31.0	6,100
Min.Bm. Ang./Cap.	0 (30.0)	6,100	0 (34.5)	4,000
Load Radius (Ft.)	50 Ft.		60.3 Ft.	
	∠°	Load	∠°	Load
15	68.5	23,400		
20	62.0	14,000	67.5	13,800
25	55.0	9,100	62.0	8,900
30	47.5	5,900	56.5	5,800
35	38.5	3,800	50.5	3,600
Min.Bm. Ang./Cap.	30.0 (38.9)		45.5 (38.3)	

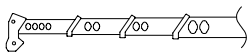
WARNING

Do Not Raise Boom Above 71° Boom Angle. Loss Of Backward Stability Will Occur Causing a Tipping Condition.

On Tire Capacities In Pounds
Tire Pressure: See Page 5
Stationary Capacities–360 Degree
See Operation Note 20

360°

ON TIRES



MAIN BOOM "B"

Load Radius (Ft.)	35.5 Ft.		40 Ft.		50 Ft.	
	∠°	Load	∠°	Load	∠°	Load
10	68.0	37,200	70.5	37,400	74.5	37,700
12	64.0	31,100	67.5	31,400	72.5	31,800
15	58.5	24,000	62.5	24,400	68.5	24,900
20	48.0	14,500	53.5	14,800	62.0	15,400
25	34.5	9,400	43.5	9,800	55.0	10,300
30			31.0	6,600	47.5	7,100
35					38.5	5,000
40					27.5	3,400
Min.Bm. Ang./Cap.	0 (30.0)	6,100	0 (34.5)	4,500	10.0 (44.1)	

Load Radius (Ft.)	60 Ft.		70 Ft.	
	∠°	Load	∠°	Load
20	67.0	15,700	71.0	
25	62.0	10,700	66.5	10,900
30	56.0	7,500	61.5	7,700
35	50.0	5,300	57.0	5,500
40	43.0	3,700	51.5	3,900
45	35.0	2,500	46.0	2,700
Min.Bm. Ang./Cap.	33.0 (46.0)		43.5 (47.2)	

WARNING

Do Not Raise Boom Above 71° Boom Angle. Loss Of Backward Stability Will Occur Causing a Tipping Condition.