



J Series

Telescopic Cranes 2800JBT

- Industry Leading Tip Heights up to 170 ft. (51.8 m) with Optional 46 ft. (14.0 m) Jib Extended
- 34,000 lbs. (15,422 kg) Rated Capacity at 10 ft. (3.0 m)
- Ideal for Applications such as...
 - ...Steel/Truss Erection
 - ...Sign Installation
 - ...Transmission Line Servicing
 - ...Roofing
 - ...General Construction

The Crane Operator's Choice



2800JBT

STANDARD CRANE SPECIFICATIONS

Rating – 34,000 lbs. (15,422 kg) @ 10 ft. (3.0 m) load radius

• 56,000 lbs. (25,400 kg) @ 5 ft. (1.5 m) load radius

LMI

Load Moment Indicating system with digital readout is standard showing actual load, maximum allowable load, boom angle, boom length, boom radius and tip height. Fully adaptable with all jib and platform options.

ANTI-TWO BLOCK SYSTEM

Basic anti-two block system with function lockout of hoist up and telescope out functions.

MAIN BOOM

Four-section fully proportional boom extension with inverted top hat cross section design for optimum strength to weight ratio. Telescope cylinder with integral holding valve extends the inner mid-section. Outer mid and fly are simultaneously and mechanically extended by 9/16 in. (14 mm) diameter cables attached to the inner and outer mid-section, which provides proportional extensions of all boom sections. Extension cables are supported by one, 4-groove, 10 in. (254 mm) tread diameter non-metallic sheave which is attached to the barrel end of the telescope cylinder.

BOOM NOSE

Three non-metallic sheaves mounted on bronze bushings. Idler sheave is a moveable sheave wheel. The boom nose also contains an integral yoke shaft for installation of optional personnel platform. Each sheave wheel contains external grease fittings for ease of maintenance.

BOOM REST

A heavy-duty removable horizontal boom rest is standard.

JIBS (OPTIONAL)

All jibs contain adjustable brackets for ease of alignment during field installation.

- 26 ft. fixed length jib
- 26 ft. to 46 ft. telescoping (2-section) jib

BOOM ELEVATION

Single double-acting lift cylinder with integral holding valve provides elevation from -8° to +80°. Mechanical pendulum angle indicators are provided on both sides of the boom.

HOIST

Layaway, planetary drive, power up and down two-speed hoist with automatic brake. Maximum single line speed of 271 fpm. Two-speed is obtainable on the fly. No stopping of the hoist needed to engage two-speed function.

SWING

Planetary drive, 375° non-continuous rotation. Equipped with spring-applied, hydraulically released, automatic multiple-disc brake. Swing bearing is bolted to the pedestal and turntable. Maximum swing speed is 1.0 rpm.

PEDESTAL

All welded box type construction reinforced to provide a rigid mount. The rear mount configuration is equipped with a special reduced height pedestal which reduces the overall height of the unit.

OUTRIGGERS AND STABILIZERS

(Front Mount Configuration - 94 ft. Boom Option Only)

Equipped with 21 ft., 6 in. (6.6 m) A-frame outriggers and 18 ft. (5.5 m) under frame out-and-down rear stabilizers. Double-acting hydraulic cylinders with integral holding valves on each extension cylinder. All attach pins are plated and wear pads are nylatron.

(Rear Mount Configuration)

Equipped with 22 ft., 3 in. (6.8 m) out-and-down over-frame box beam outriggers and stabilizers. Double-acting hydraulic cylinders with integral holding valves on each jack cylinder. All attach pins are plated and wear pads are nylatron.

TORSION BOX (SUB-FRAME)

Four-plate design with internal cross bracing is continuously welded on all four sides to achieve optimum rigidity and torsional strength.

CONTROL STATIONS

Extra-wide dual operator stations equipped with four main single lever crane controls, arranged to PCSA standards. Fully proportional control valves. Outrigger and stabilizer controls allow independent extension and retraction. Each station contains engine start/stop switch, warning horn and bubble level indicators. Load charts, range diagrams, jib charts and component deduction charts are mounted on pivoting plates directly in front of the operator.

HYDRAULIC SYSTEM

A three-section pump is direct mounted to a power take-off on the truck transmission. Flow distribution is 39 gpm (148 lpm) to the hoist function, 24 gpm (91 lpm) to the crane function, and 9 gpm, (34 lpm) to the swing function. A 90 gallon (341 l) reservoir includes a 10 micron high flow filter in the return line. Sight and temperature gauges are integral on the hydraulic tank face plate. Gate valves are used for servicing the hydraulic pump and/or PTO without fluid removal.

ELECTRICAL SYSTEM

12 volt direct. All internal strips, relays and accessory circuits are enclosed in a NEMA 12X rated weather-resistant electrical box. Wires are terminated individually and color coded for improved circuitry diagnosis and serviceability.

MOUNTING

Pedestal and torsion sub-frame are bolted directly to the chassis by Grade 8 bolts. Requires no welding.

DESIGN/WELDING

Design conforms to ANSI B30.5-1994. All welding conforms to ANSI/AWS D14.3.



DANGER! DO NOT OPERATE WITHIN 10 FT. (3.0 M) OF POWER LINES

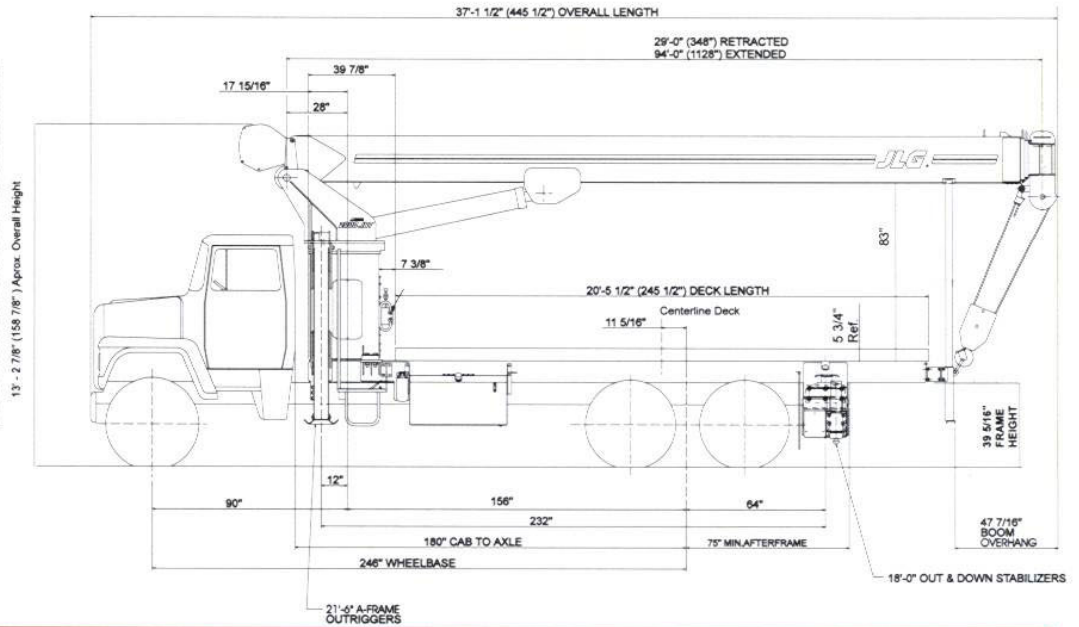
DESIGN MEETS ANSI B30.5-1994/STABILITY MEETS SAE J765-1990 STANDARDS

AS ORIGINALLY MANUFACTURED FOR INTENDED APPLICATIONS

94 FOOT FRONT MOUNT

Wheelbase: 246"
 Cab to Axle: 180"
 Min. A.F.: 75"
 Min. F.A.W.R.: 16,000 #
 Min. R.A.W.R.: 34,000 #

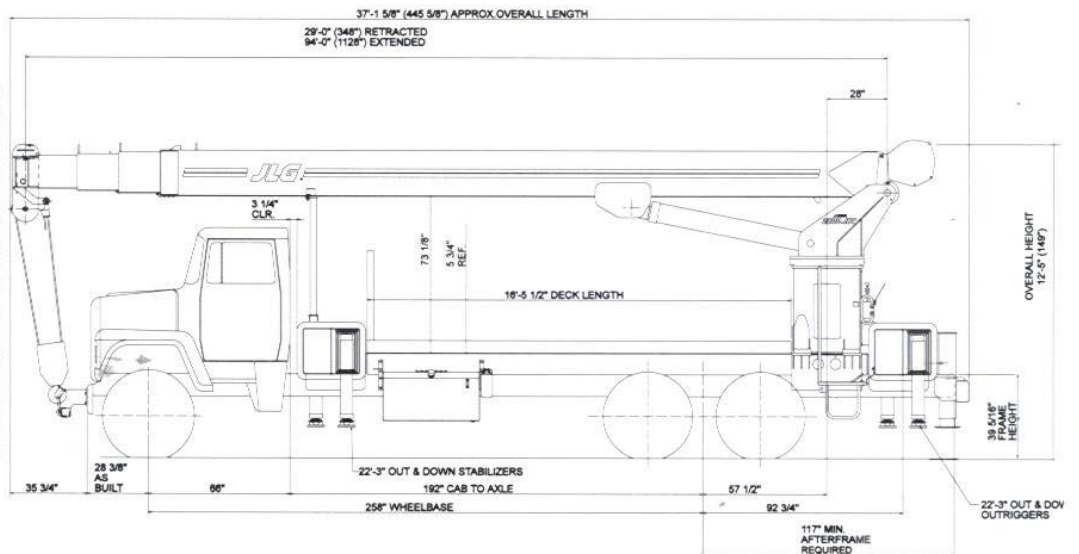
Truck Frame: 30 in.³
 S.M. on 110,000 psi



94 FOOT REAR MOUNT

Wheelbase: 258"
 Cab to Axle: 192"
 Min. A.F.: 117"
 Min. F.A.W.R.: 16,000 #
 Min. R.A.W.R.: 34,000 #

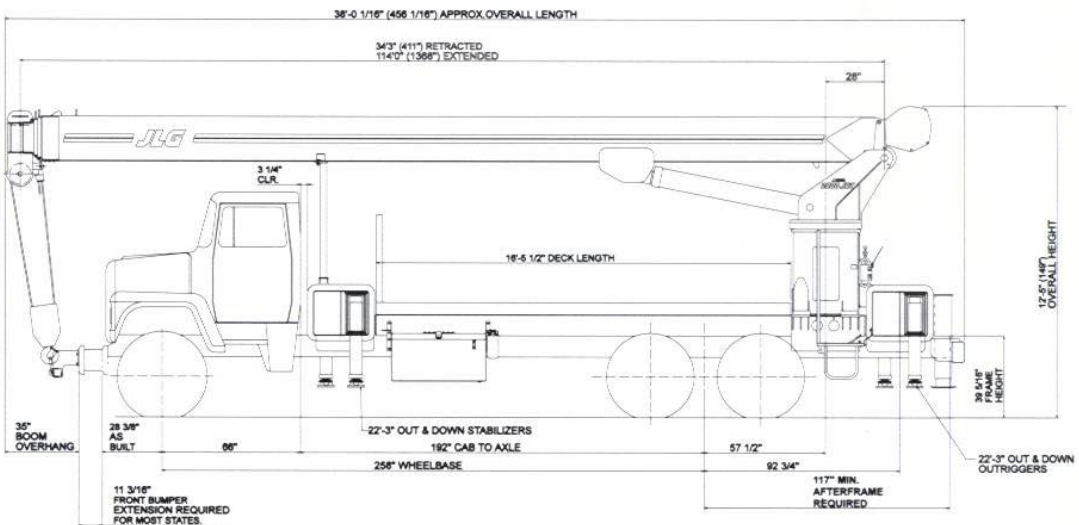
Truck Frame: 30 in.³
 S.M. on 110,000 psi



114 FOOT REAR MOUNT

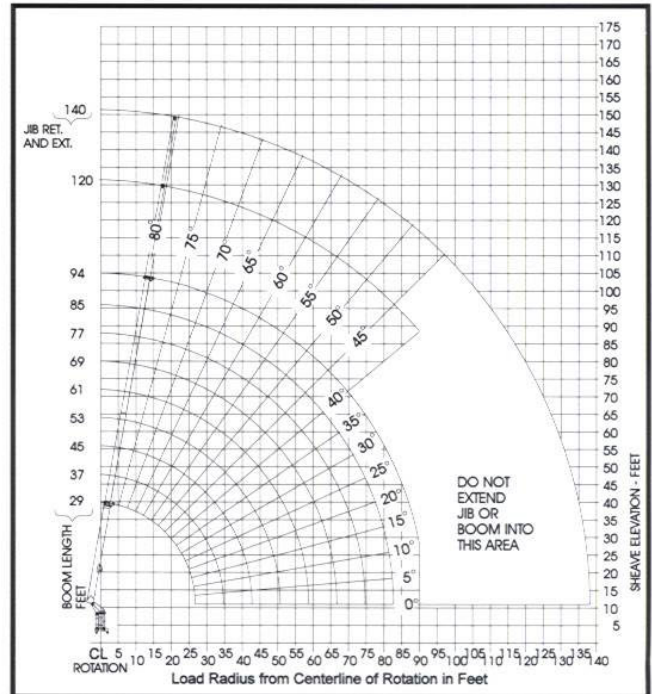
Wheelbase: 258"
 Cab to Axle: 192"
 Min. A.F.: 117"
 Min. F.A.W.R.: 18,000 #
 Min. R.A.W.R.: 34,000 #

Truck Frame: 30 in.³
 S.M. on 100,000 psi



94 FOOT BOOM

RATED LIFTING CAPACITIES IN POUNDS									
LOAD RADIUS FEET	BOOM LENGTH IN FEET								
	29	37	45	53	61	69	77	85	94
5	56000								
10	34000	22000	21000	20500					
12	29000	22000	21000	20500	20500				
15	23000	21500	21000	20500	20500	19500	18500		
20	18000	18000	18000	17000	17000	16000	14500	13000	10250
25	14000	14000	14000	14000	14000	13000	12000	10500	9000
30		11000	11000	11000	11000	11000	10500	9500	8000
35			9000	9000	9000	8500	8500	8000	7000
40			7500	7500	7400	7300	7000	6600	6100
45				5900	5900	5900	5900	5600	5300
50				4700	4700	4700	4700	4700	4600
55					4000	4000	4000	4000	4000
60						3400	3400	3400	3400
65							2800	2800	2800
70								2250	2250
75								1900	1900
80									1450
85									1200
90									1000

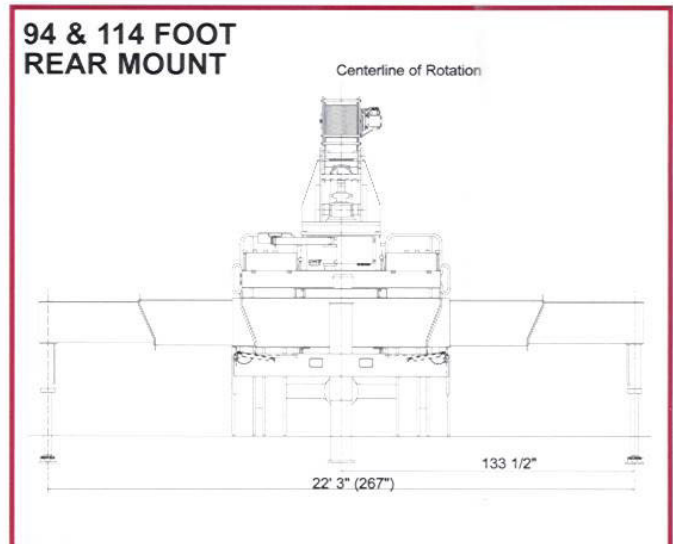
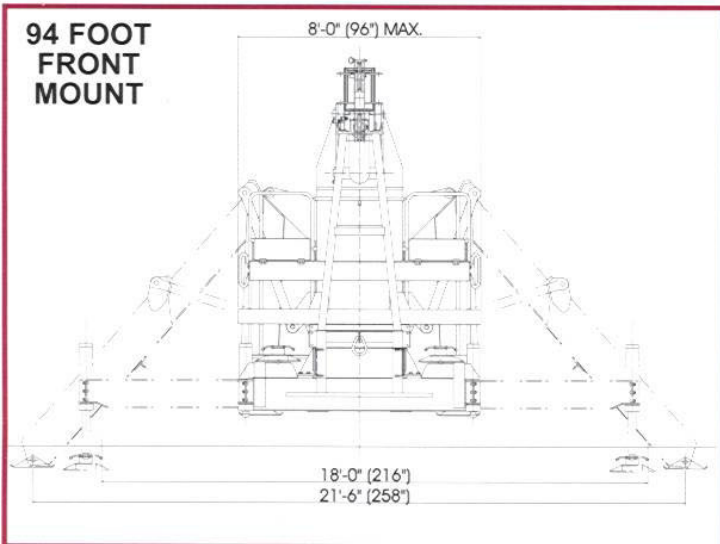


LOAD CHART				
RATED JIB LIFTING CAPACITIES IN POUNDS				
26-46 FT. 2 SECTION JIB			26 FT. FIXED JIB	
MINIMUM BOOM ANGLE	JIB FULLY RETRACTED	JIB FULLY EXTENDED	MINIMUM BOOM ANGLE	
80°	5000	2900	80°	5100
75°	4400	2700	75°	4500
70°	3400	2000	70°	3500
65°	2700	1700	65°	2800
60°	1900	1400	60°	2000
55°	1400	1100	55°	1500
50°	1100	750	50°	1200
45°	750	600	45°	850
40°	500		40°	600

WEIGHT REDUCTION FOR LOAD HANDLING DEVICES

- Headache Ball130 lbs.
- Hook Block (Single Sheave)220 lbs.
- Hook Block (Double Sheave)300 lbs.
- Hook Block (Triple Sheave)425 lbs.
- Snatch Block150 lbs.
- 2-Section Jib Stowed100 lbs.
- 2-Section Jib Erected (Retracted)1600 lbs.
- 2-Section Jib Erected (Extended)1700 lbs.
- 1-Section Jib Stowed70 lbs.
- 1-Section Jib Erected1100 lbs.

Do not operate this crane unless you know the diameter and type rope currently installed on the crane. Do not exceed permissible rope pull of rope installed on this crane. Do not use 3-part line with boom length over 70 ft. Do not use 4-part line with boom length over 53 ft. Do not use 5-part line with boom length over 37 ft. Do not use 6-part line with boom length over 29 ft. Do not operate this crane until you have read and understood "Lifting Notes" decal on pedestal.



114 FOOT BOOM

RATED LIFTING CAPACITIES IN POUNDS

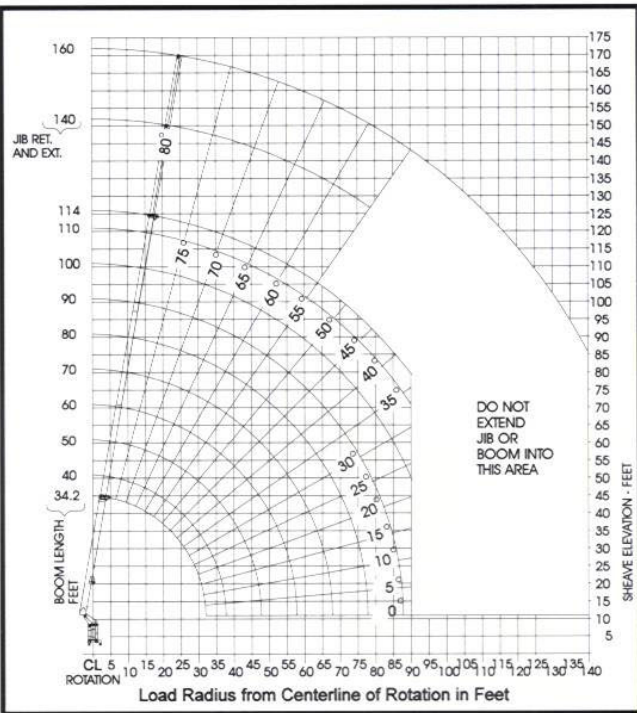
LOAD RADIUS FEET	BOOM LENGTH IN FEET									
	34.25	40	50	60	70	80	90	100	110	114
5	56000									
10	34000	22000	21000							
12	28000	22000	21000	20500						
15	23000	21500	20000	18500	17000	15000				
20	17000	16500	16000	15000	13500	12500	11000	9000		
25	12250	12000	11750	11500	11000	10500	9500	8000	7000	5900
30	10000	9800	9600	9400	9200	9000	8000	7000	6000	5000
35		7800	7700	7600	7500	7400	6900	6000	5100	4200
40			6400	6300	6200	6100	5900	5100	4400	3800
45			5200	5200	5100	5100	5000	4400	3700	3200
50				4300	4300	4200	4200	3600	3100	2700
55				3500	3500	3400	3400	3000	2700	2400
60					2900	2900	2800	2500	2400	2200
65					2300	2300	2300	2200	2100	2000
70						1800	1800	1800	1700	1600
75						1500	1500	1500	1400	1300
80							1300	1200	1100	1000
85							1100	1100	1000	900
90								900	900	800

**LOAD CHART
RATED JIB LIFTING CAPACITIES IN POUNDS**

26-46 FT. 2 SECTION JIB			26 FT. FIXED JIB	
MINIMUM BOOM ANGLE	JIB FULLY RETRACTED	JIB FULLY EXTENDED	MINIMUM BOOM ANGLE	
80°	4500	2500	80°	4600
75°	4000	2000	75°	4100
70°	2700	1600	70°	2800
65°	1900	1200	65°	2000
60°	1100	800	60°	1200
55°	600	500	55°	700

LIFTING NOTES (Use with "Lifting Capacities" Chart on Console)

- Rated Lifting Capacity above the bold line is based on structural strength and not machine stability. Overloading this crane may cause structural collapse or upset.
- Rated Lift Capacity is based on freely suspended loads. It is the maximum covered by the manufacturer's warranty with the crane leveled on a firm, uniform supporting surface. To level, extend the outriggers and stabilizers until the vehicle tires are completely free of the bearing surface (use bubble level on control console). Blocking under outriggers and stabilizers may be necessary to assure a firm surface and/or to level machine. Lift capacity depends on capacity and condition.
- Practical working loads for each particular job shall be established by the user depending on operating conditions including the supporting surface, wind and other factors affecting stability, hazardous surroundings, personnel experience, handling of load, etc.
- Load radius is the horizontal distance from the axis of rotation to the centerline of the hoist line or tackle with load applied. Load radius increases due to slight boom deflection when load is applied, especially with a long boom or a jib.
- If load radius and/or boom length falls between chart values, use lift capacity for next longer rated radius and/or boom length.
- All load handling devices and boom attachments are considered part of the load and lift capacities must be reduced accordingly. See "Weight Reduction for Load Handling Devices".
- The maximum load which may be telescoped is limited by hydraulic pressure, boom angle, boom lubrication, etc. It is safe to attempt to telescope any load within the chart limits.
- For magnet, clamshell or bucket operation, weight of handling device and load must not exceed 90% of rated lift capacities.
- Over the front operation is only permitted on cranes equipped with optional front stabilizer and on rear mounted cranes. See decal for permitted areas of operation.



WEIGHT REDUCTION FOR LOAD HANDLING DEVICES

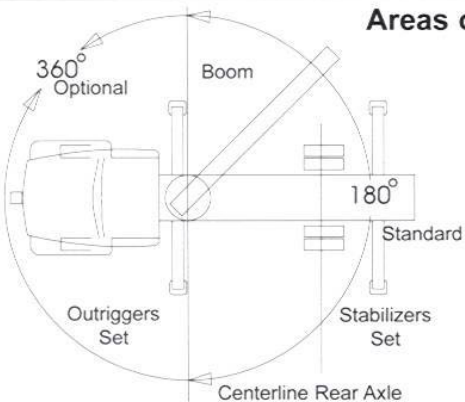
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Hook Block (Single Sheave)	220 lbs.
Hook Block (Double Sheave)	300 lbs.
Hook Block (Triple Sheave)	425 lbs.
Snatch Block	150 lbs.
2-Section Jib Stowed	100 lbs.
2-Section Jib Erected (Retracted)	1600 lbs.
2-Section Jib Erected (Extended)	1700 lbs.
1-Section Jib Stowed	70 lbs.
1-Section Jib Erected	1100 lbs.

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Note: Swing is approximately 375° rotation non-continuous on outriggers with rotation limiter or 360° rotation continuous on outriggers w/oil coupling.

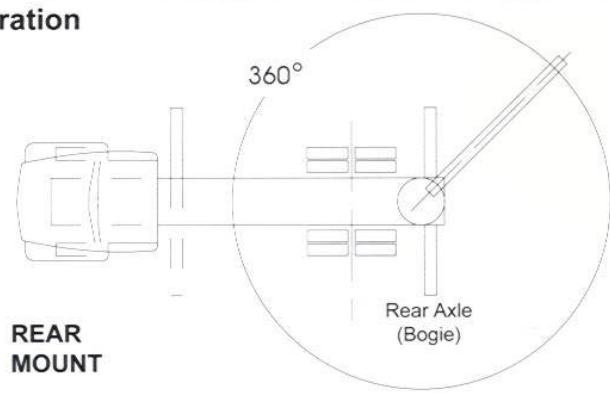
FRONT MOUNT

Front Bumper Mounted Stabilizer (optional) required for 360° or personnel platform operation.



Areas of Operation

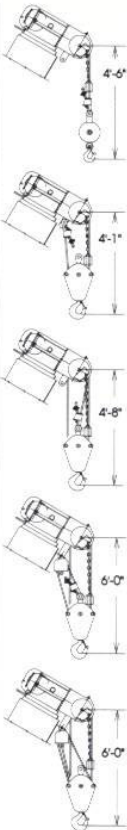
REAR MOUNT



TRUCK CHASSIS NOTES

- Weights do not include options.
- Distributor must submit a "Chassis Cab Engineering Data Sheet" before acceptance of a firm purchase order.
- Trucks require an electric engine shut-off in order for the console stop switch to be functional.
- Diesel engine with a mechanical governor also must have a variable speed governor.
- Horizontal exhaust with vertical muffler will require extensive exhaust modifications. A "Chassis Cab Engineering Data Sheet" must be submitted before additional charges can be added. Exhaust modifications do not include parts. Refer to "Standards Relocation Charges."
- Automatic transmissions must have a neutral lock-up. (Chassis manufacturer supplied).
- All chassis must meet minimum truck specifications for model and boom length. Refer to specific model literature.
- Some chassis equipped with automatic transmissions require a remote mounted pump with a drive shaft and clockwise rotation pump. Consult factory for installation charges.
- Trucks with longer wheel bases than those specified on the specific model literature will require a higher FAWR (Front Axle Weight Rating) than is listed on the specification sheet. Consult factory for proper rating.
- If cab heights, as measured from the top of the truck frame to the top of the cab roof, exceed 68.5 in. (1740 mm), consult factory for additional charges.
- Truck frames with heights greater than 39.3 in. (997 mm) will increase overall height of the mounted crane and will decrease outrigger and stabilizer ground penetration.
- Truck frames with widths less than 34 in. (863 mm) will require special brackets and shims. Consult factory for additional installation charge.
- Trucks with air horns require an electrical horn. Consult factory for installation charge.
- Cranes utilizing the air throttle option will require a chassis air compressor.
- Special or heavy duty decks will increase weight on the rear axle, while reducing water level payload availability. "Chassis Cab Engineering Data Sheet" must be submitted and approved before installation.
- Chassis engines that do not have manual throttle linkage will require additional charges. Consult factory.

Permissible Rope Pull



Number Parts Line	9/16" Dia. 400' of Low Rotation Flex x 19 Plus
SINGLE	8100 lbs.
TWO	16200 lbs.
THREE	24300 lbs.
FOUR	32400 lbs.
FIVE	40500 lbs.
SIX	48600 lbs.

Number Parts Line	9/16" Dia. 400' of 6 x 37 IWRC EIPS
SINGLE	* 9600 lbs.
TWO	19200 lbs.
THREE	28800 lbs.
FOUR	38400 lbs.
FIVE	48000 lbs.
SIX	56000 lbs.

*Single Line Pull - 9200 lbs. on Fifth Layer of Winch Only

Hoist Specifications - Braden PD12C

Performance @ 3000 psi	Low Speed - 39 gpm			High Speed - 63 gpm	
	Line Speed	Line Pull Low Rotation	Line Pull 6 x 7 EIPS	Line Speed	Line Pull
1ST LAYER	120 fpm	8100 lbs.	9600 lbs.	194 fpm	8040 lbs.
2ND LAYER	132 fpm	8100 lbs.	9600 lbs.	213 fpm	7310 lbs.
3RD LAYER	144 fpm	8100 lbs.	9600 lbs.	233 fpm	6700 lbs.
4TH LAYER	156 fpm	8100 lbs.	9600 lbs.	252 fpm	6180 lbs.
5TH LAYER	168 fpm	8100 lbs.	9200 lbs.	271 fpm	5735 lbs.

AVAILABLE OPTIONS

- Two Man Gravity Leveling Platform (Main Boom or Jib)
- One Man Fiberglass Bucket (Main Boom or Jib)
- Two, One Man Fiberglass Buckets (Main Boom or Jib)
- Radio Remote Controls (94 ft. boom only)
- Hardwire Remote Controls
- Hydraulic Oil Cooler
- Front Center Stabilizer for 360° Area of Operation
- Consult Factory for Other Options Available for Specific Customer Needs

USTC

Leading Manufacturer of a Full Line of Quality Telescopic Truck Cranes, Trolley Booms, Work Platforms and Truck or Trailer-Mounted Rough Terrain Mobile Forklifts

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