

## 2892C

### STANDARD COMPONENTS INCLUDE:

Boom, boom hoist cylinder, 2-speed winch, load line and 5 Ton (4,5 mt) overhaul ball, turret, pedestal, dual operator control stations, LMI & ATB protection systems, sub-frame, a-frame link outriggers, a-frame rear stabilizers, hydraulic reservoir and boom rest.

### HYDRAULICS

- 8-Bolt direct mounted PTO with SAE B or SAE BB output
- Three-section gear pump, SAE BB input (standard)

Pump Section	2000 RPM	2000 RPM
Shaft End Pump:	32.4 GPM @ 100 PSI	123 LPM @ 100 PSI
Center Pump:	20.6 GPM @ 100 PSI	78 LPM @ 100 PSI
Cover End Pump:	10 GPM @ 100 PSI	38 LPM @ 100 PSI

- Hydraulic reservoir - 70 gallon (265 liter) capacity

### WARNING SYSTEMS

- Wireless LMI with display and crane function shut-offs for overload protection
- Wireless anti-two block system

### OPTIONS

- Out-down pedestal outriggers
- Wired LMI and ATB system
- 20' (6,2 m) Flatbed - wood or 1/8" steel deck
- 20' (6,2 m) Heavy hauler flatbed - 3/16" steel deck w/rub rails
- 24" (610 mm) Bulkhead
- 26' (7,9 m) Fixed jib
- 26' (7,9 m) - 46' (14,0 m) 2-Section telescopic jib
- Rotation resistant wire rope, 9/16" (14,3 mm) diameter
- Load block - 1 & 3 sheave options
- Front center stabilizer for 360° work area
- Three section vane pump, SAE B input
- Hydraulic oil cooler
- Hose reel - boom mounted
- Toolboxes
  - 24" L x 20" W x 18" H (610 mm x 508 mm x 457 mm)
  - 48" L x 18" W x 18" H (1220 mm x 457 mm x 457 mm)
- 2-Person gravity leveled non-rotating basket - 600 lb (272 kg) capacity
- 2-Person gravity leveled rotating (manual) basket - 1200 lb (544 kg) capacity
- 4-Function radio remote crane control system
- Wireless load cell and display for load monitoring (included with jib)

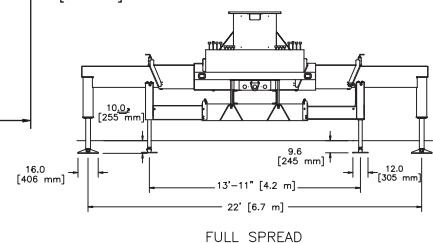
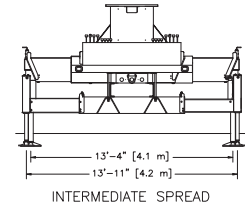
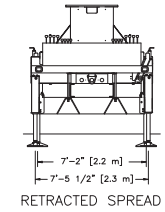
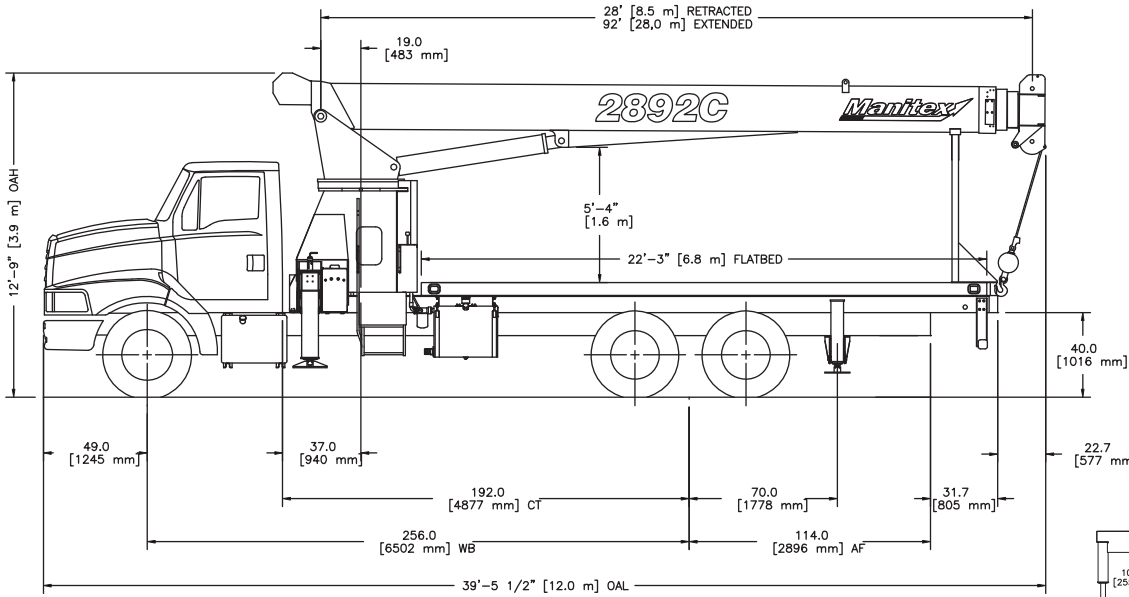
### BOOM

- 28 Ton (24,4 mt) capacity @ 5' (1,5 m) radius
- 4-Section 92' (28,0 m) proportional boom
- 3-Sheave quick reeve boom point

### HOIST

- Maximum theoretical line speed 300 fpm (91 mpm)
- Maximum theoretical bottom-layer line pull 11,500 lb (5,216 kg)
- Wire Rope – 300' (91,4 m) of 9/16" (14,3 mm) diameter 6 x 25 EIPS IWRC

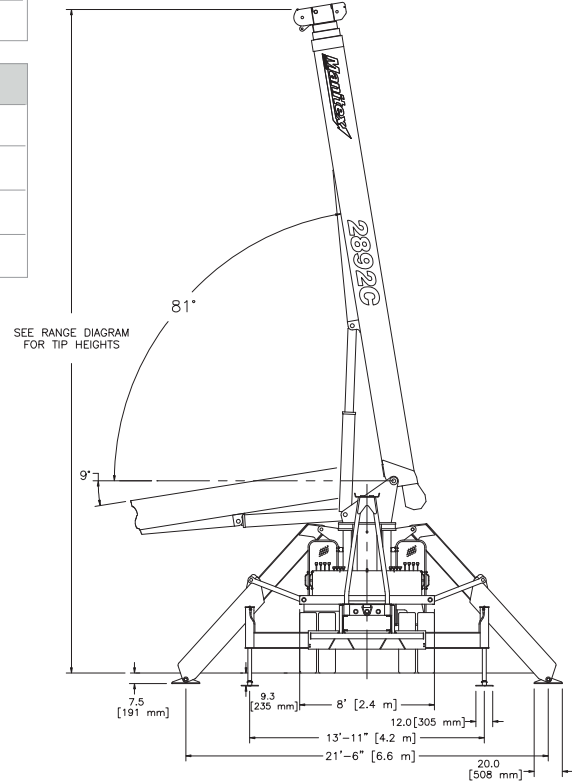
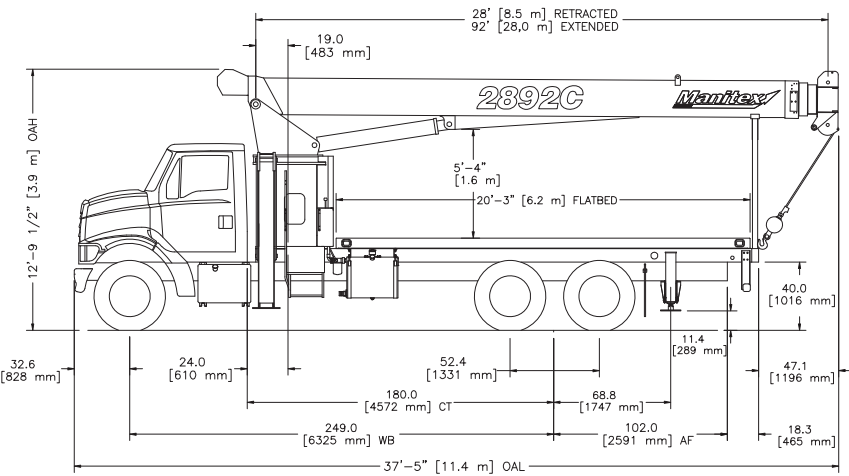
*In order to ensure continuous improvement, Manitex reserves the right to change design and specifications without notice.*



CHASSIS DATA	2892C
Wheelbase (WB)	249" 6 426 mm
Cab to Tandem (CT)	180" 4 527 mm
After Frame (AF)	102" 2 591 mm
Frame Section Modulus	23 in <sup>3</sup> 110,000 psi 758 422 kPa
Frame Section Modulus at 180°/360° Rotation (Minimum)*	28 in <sup>3</sup> 110,000 psi 758 422 kPa
Front Axle Gross Weight Rating	16,000 lb 7 257 kg
Rear Axle Gross Weight Rating	34,000 lb 15 422 kg
Minimum Truck Axle Weight - Front**	8,500 lb 3 855 kg
Minimum Truck Axle Weight - Back**	8,150 lb 3 697 kg
Nominal Frame Width	34" 864 mm

WEIGHTS	2892C
Total Crane - Standard	20,452 lb 9 292 kg
Total Crane - Out & Down Outrigger	21,622 lb 11 184 kg
20' (6,10 m) Flat Bed - Standard Outriggers	1,840 lb 835 kg
22' (6,71 m) Flat Bed - Out & Down Outrigger	2,000 lb 907 kg
26' (7,93 m) Fixed Length Jib	832 lb 377 kg
26' (7,93 m) Fixed Length Jib	1,226 lb 556 kg

MAXIMUM TIP HEIGHT (A)	2892C
Configuration	Boom 92' 28,0 m
Extended Boom	103' 31,4 m
Fixed or Retracted Jib	129' 4" 39,4 m
Extended Jib	149' 45,4 m



\*Also applies to front frame extensions for single front stabilizer.  
\*\*Minimum chassis weight is required to meet 85% stability requirements.  
Chassis data is general-not for engineering. Some dimensions depend on truck selection.

## General Specifications

### GENERAL

**Electrical** – State-of-the-art, weather-resistant components throughout. Hermetically sealed enclosure includes power in relays and circuit status LEDs.

**Design/Welding** – Design conforms to ANSI B30.5. Tested to SAE 1063 and SAE 765.

Welding conforms to AWS D1.1. Tested to SAE 1063 and SAE 765.

**Manuals** – Operator/maintenance and parts manuals depict recommended crane operation, maintenance procedures and parts listings.

**Warranty** – 12-month warranty covers parts and labor resulting from defects in material and workmanship.

*\* In order to ensure continuous improvement, specifications may change without notice.*

## Features

- 17 Ton (15,5 mt) thru 35 Ton (31,8 mt) Capacities
- Proportional Telescopic Booms
- Fixed & Telescopic Jib Options
- Removable Boom Rest
- Two Speed Grooved Drum Hoist
- Dual Operator Control Stations
- Hydraulic System Pressure Gauge
- Audible Outrigger Motion Alarm
- Front Center Stabilizer Option for 360° Work Area
- Load Chart for Multiple Outrigger Spread Options (model dependent)
- Overload Protection System with Digital Text Display
- Anti-Two-Block System (wireless & wired options)
- Weatherproof Automotive Style Electrical System
- Hydraulic Oil Cooler Option
- Clamp-On Mounting
- Design Meets ANSI B30.5 Recommendations
- Manitex UPTIME Comprehensive Support

## General Specifications

### BOOM

Inverted T-cross section designed for optimum strength to weight ratio; 3, 4 or 5-section telescoping type, extended and retracted proportionally by a double-acting hydraulic cylinder and a cable-crowd system. Fitted with easily replaceable self-lubricating wear pads for smooth operation.

**Quick Reeve Boom Point** – Fitted with upper and lower high-density nylon load sheaves mounted on heavy duty roller bearings. Removable, pin-type rope guards.

**Boom Elevation** - Double-acting hydraulic cylinder. Working range from 10° below horizontal to 80° above.

**Load Hook** - 5-ton (4,5 mt) capacity hook with heavy-duty swivel and weight is provided for single-line operation.

**Jib (Option)** - Inverted T-cross section designed for optimum strength to weight ratio. 1-section fixed or 2-section telescopic manually extended.

### HOIST

Planetary reducer with wet multi-disc spring applied, hydraulically released internal brake and grooved drum; negative draft angle on drum flange to minimize load line stacking while spooling. High efficiency two-speed hydraulic motor equipped with patented brake valve for precise lowering.

**Wire Rope** - Type 6 x 25 EIPS IWRC (3:1 SF) or optional Rotation Resistant (5:1 SF).

### SWING SYSTEM

Oversized diameter ball-bearing swing circle with external gear. 372° Non-continuous rotation.

Externally mounted, double-reduction planetary gearbox driven by hydraulic motor. Wet multi-disk internal brake is spring-applied, hydraulic pressure released.

### OUTRIGGERS

Equipped with double-acting hydraulic cylinders, pivoting pads and alarm to alert personnel when outriggers are in motion. Bubble levels located at each operator control station.

**A-Frame Link Style** - Single spread outriggers operate independently for precise leveling.

**Out-and-Down Style** - Fully retracted, intermediate and full extension outrigger beam positions (model dependent).

Outrigger jacks operate independently for precise leveling.

### STABILIZERS

Rigid design, clamp mounted under truck chassis by threaded rods and cross tube.

A-Frame style – Single spread design, double-acting hydraulic cylinders operated independently for precise leveling. Fixed foot pad with flared leading edge.

Out-and-Down style - Fully retracted, intermediate and full extension outrigger beam positions (model dependent). Outrigger jacks with pivoting steel float pads operate independently for precise leveling.

Front Bumper Stabilizer (FBS) - Option required for lifting operations over the front (360°). FirstUp auto retract feature prevents drive away damage. Consists of a single stabilizer assembly mounted at the front of the truck; maximum float load is controlled by preset counterbalance valve to prevent overloading the stabilizer. This option requires truck front full-frame extensions, consult factory.

### MOUNTING

Pedestal subframe and stabilizers are mounted to chassis by threaded rods and clamp plates. No welding, drilling, or bolting to truck frame is required.

**Subframe** – Torsion resistant, rigid 4-plate design mounted under crane full length of truck frame.

**Rear Underride Protection** - Standard on factory-mounted cranes. Fabricated structure mounted under rear of crane. Complies with Bureau of Motor Carrier Safety Standard 393.86.

**Boom Rest** - Heavy-duty fabrication, easily removed for unencumbered loading and unloading of crane deck.

### CONTROL SYSTEM

Dual operator stations are equipped with four single-lever crane controls arranged in accordance with ANSI B30.5 standards. Fully proportional control valves. A system pressure gauge is mounted on the driver's side console. Each station includes individual control levers for each outrigger and stabilizer for precise leveling. These control levers are shorter and positioned towards the center of the crane away from the main crane controls for added safety. Both control stations are equipped with engine start/stop, foot throttle, signal horn, boom angle indicator, beverage holder, load chart with range diagram and mount for removable LMI display.

### HYDRAULICS

**Hydraulic System** – A 3-section pump direct-mounted to power take-off on truck transmission provides fluid power to the winch, boom hoist, telescope, and swing and outrigger circuits. 70 gallon (265-liter) or 115 gallon (435-liter) baffled reservoir includes suction ball valve with strainer and 25-micron filters in the return line. Use of SAE O-ring and O-ring face seal hydraulic fittings throughout system eliminate oil leaks.

**Hydraulic Cylinders** - All load-holding cylinders are equipped with integral holding valves.

### WARNING SYSTEMS

**Hydraulic Capacity Alert System (HYCAS)** – Hydraulically senses boom hoist cylinder pressure, audio warning indicates overload condition and overload shutoff feature prevents continuing overload.













**Radio Load Cell** - Required option on HYCAS machines for jib operations includes wireless transmitter and receiver/display. Screen displays weight of load on crane hook; intended as an operator aid, helps prevent against jib overloads.

**Load Moment Indicator (LMI)** - CAN bus system. Senses boom hoist cylinder pressure, boom length and boom angle. Audio-visual warning indicates overload conditions, overload shutoff feature prevents continuing overload. Provides operator access to all relative crane configuration and load conditions via display at the operator station.

**Anti-Two-Block System** - Audible warning and shut-off functions prevent hook from contacting boom point. Wireless and wired systems offered on certain models.

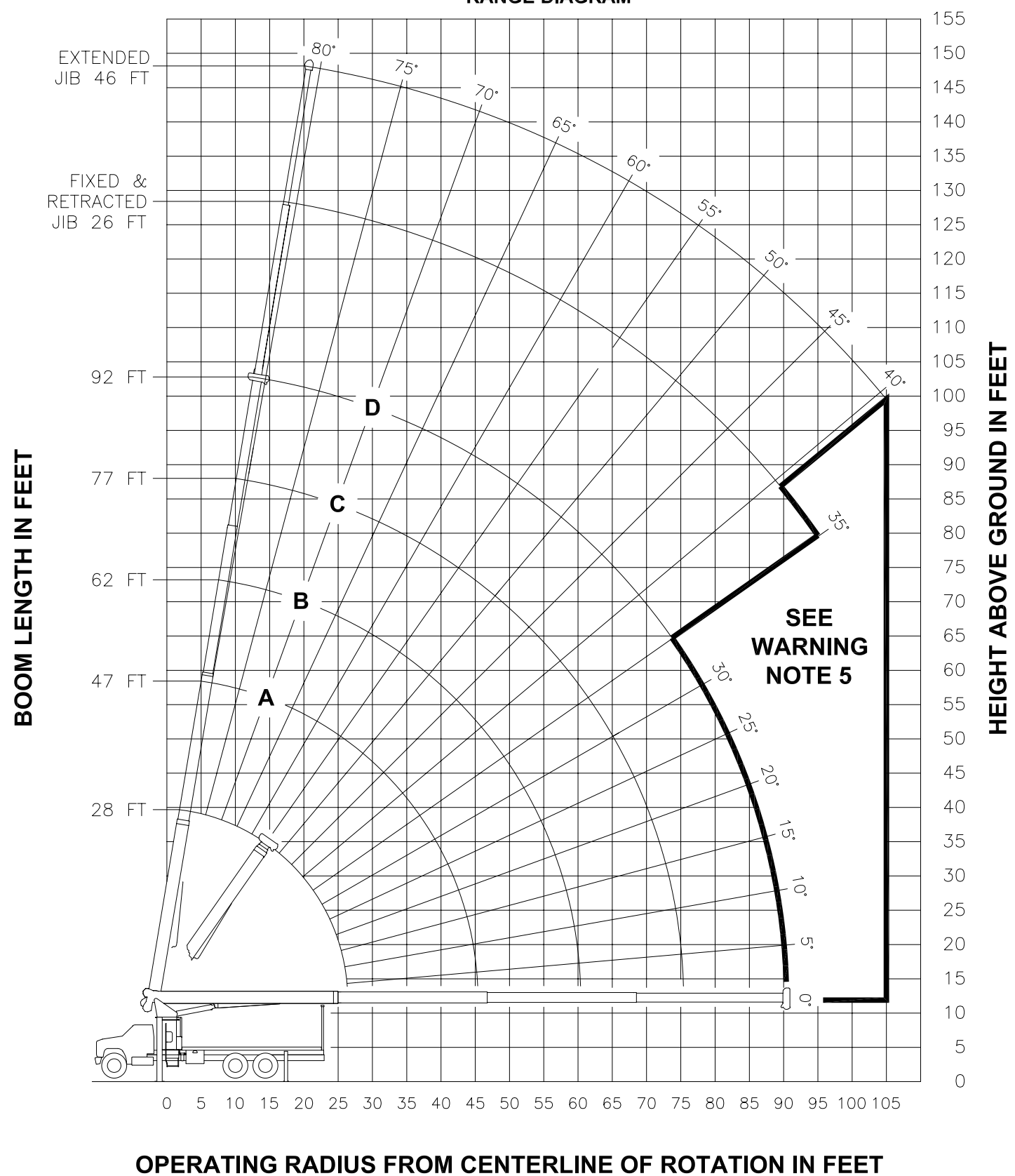
**Back-Up Alarm** – Supplied on factory-mounted cranes, electronic audible motion alarm activated when truck transmission is in reverse gear.

## BOOM AND JIB COMBINATIONS

1770C	70' (21,3 m)	3 Section Boom	24' - 41' 2-Section Jib (7,3 m - 15,5 m)
			
2250C	50' (15,2 m)	3 Section Boom	20' - 34' 2-Section Jib (6 m - 10,4 m)
			
2262C	62' (18,9 m)	3 Section Boom	24' - 42' 2-Section Jib (7,3 m - 12,8 m)
			
2281C	81' (24,7 m)	4 Section Boom	24' - 41' 2-Section Jib (7,3 m - 12,5 m)
			
2277C	77' (23,5 m)	3 Section Boom	29' - 52' 2-Section Jib (8,8 m - 15,8 m)
			
26101C	101' (30,8 m)	4 Section Boom	29 1-Section Jib (8,8 m)
			
2871C, 3071C	71' (21,6 m)	3 Section Boom	
			
2892C	92' (28 m)	4 Section Boom	26' - 46' 2-Section Jib (7,9 m - 10 m)
			
30102C	102' (31 m)	4 Section Boom	26' - 46' 2-Section Jib (7,9 m - 14 m)
			
3577C	77' (23,5 m)	3 Section Boom	
			
35100C	100' (30,5 m)	4 Section Boom	30.5' - 55' 2-Section Jib (9,3 m - 16,7 m)
			
35124C	124' (37,8 m)	5 Section Boom	31' 1-Section Jib (9,4 m)
			



**RANGE DIAGRAM**



LOAD RATINGS IN LBS WITH OUTRIGGERS AND STABILIZERS EXTENDED

OPERATING RADIUS FT	LOADED BOOM ANGLE					OPERATING RADIUS FT	JIB LOAD RATINGS WITH OUTRIGGERS AND STABILIZERS EXTENDED			
	28 FT	47 FT	62 FT	77 FT	92 FT		JIB LENGTH FOR ALL BOOM LENGTHS SEE WARNING NOTE 4	JIB LENGTH FOR ALL BOOM LENGTHS SEE WARNING NOTE 4		
5	79	56000								
8	73	40670					26 FT	46 FT		
10	69	34520	78	22500						
12	64	30130	76	21510	80	20400				
15	57	25430	72	17730	77	16660	80	15920		
20	43	20130	65	13720	72	12720	77	12030	79	10700
25	22	15630	58	11160	67	10240	73	9600	76	9120
30			50	9330	62	8530	69	7930	73	7460
35			41	7900	57	7240	65	6680	70	6250
40			30	6580	51	6230	60	5730	67	5330
45			11	4740	44	5380	56	4960	63	4580
50					36	4620	51	4330	59	3980
55					27	3760	46	3770	55	3470
60					10	2670	40	3170	51	3040
65							33	2610	47	2650
70							24	2140	42	2200
75							9	1430	37	1800
80									31	1460
85									23	1170
90										
95										
100										
105										
	460 LBS	270 LBS	210 LBS	170 LBS	140 LBS	DEDUCTIONS FOR STOWED FIXED JIB				
	690 LBS	410 LBS	310 LBS	250 LBS	210 LBS	DEDUCTIONS FOR STOWED TELESCOPIC JIB				

**WARNING**

1. THE OPERATOR MUST READ AND UNDERSTAND THE OWNER'S MANUAL BEFORE OPERATING THIS CRANE.
2. POSITIONING OR OPERATION OF CRANE BEYOND AREAS SHOWN ON THIS CHART IS NOT INTENDED OR APPROVED EXCEPT WHERE SPECIFIED IN OWNER'S MANUAL.
3. LOADED BOOM ANGLES AT SPECIFIED BOOM LENGTHS GIVE ONLY AN APPROXIMATION OF THE OPERATING RADIUS. THE BOOM ANGLE BEFORE LOADING SHOULD BE GREATER TO ACCOUNT FOR DEFLECTIONS. DO NOT EXCEED THE OPERATING RADIUS FOR RATED LOADS.
4. THE OPERATING RADIUS SHOWN IN THE JIB RATING CHART IS FOR FULLY EXTENDED BOOM ONLY. WHEN BOOM IS NOT FULLY EXTENDED, USE ONLY LOADED BOOM ANGLE TO DETERMINE LOAD RATING OF JIB.
5. BOOM MUST BE FULLY RETRACTED WHEN JIB IS ERECTED, BEFORE LOWERING BOOM THRU THIS AREA.
6. FOR BOOM ANGLES NOT SHOWN ON JIB LOAD RATING CHART, USE RATING OF NEXT LOWER BOOM ANGLE.
7. FOR BOOM LENGTHS NOT SHOWN, USE RATING OF NEXT SHORTER OR LONGER BOOM LENGTH, WHICHEVER IS LESS. FOR RADII NOT SHOWN, USE RATING OF NEXT LONGER RADIUS.
8. CRANE LOAD RATINGS ON OUTRIGGERS ARE BASED ON FREELY SUSPENDED LOADS WITH THE MACHINE LEVELED AND STANDING ON A FIRM UNIFORM SUPPORTING SURFACE. NO ATTEMPT SHALL BE MADE TO MOVE A LOAD HORIZONTALLY ON THE GROUND IN ANY DIRECTION.
9. PRACTICAL WORKING LOADS DEPEND ON SUPPORTING SURFACE, WIND, AND OTHER FACTORS AFFECTING STABILITY SUCH AS HAZARDOUS SURROUNDINGS, EXPERIENCE OF PERSONNEL, AND PROPER HANDLING, ALL OF WHICH MUST BE TAKEN INTO ACCOUNT BY THE OPERATOR.
10. THE MAXIMUM LOAD WHICH MAY BE TELESCOPED IS LIMITED BY HYDRAULIC PRESSURE, BOOM ANGLE, AND BOOM LUBRICATION. IT IS SAFE TO ATTEMPT TO TELESCOPE ANY LOAD WITHIN THE LIMITS OF THE LOAD RATING CHART. BOOM MUST BE FULLY RETRACTED AGAINST BOOM STOPS AT ALL TIMES WHEN LIFTING MINIMUM BOOM LENGTH CAPACITY LOADS.

**INFORMATION**

1. DEDUCTIONS MUST BE MADE FROM RATED LOADS FOR STOWED JIB, OPTIONAL ATTACHMENTS, HOOKS, AND LOAD-BLOCKS (SEE DEDUCTION CHART). WEIGHTS OF SLINGS AND ALL OTHER LOAD HANDLING DEVICES SHALL BE CONSIDERED A PART OF THE LOAD.
2. CRANE LOAD RATINGS WITH OUTRIGGERS ARE BASED ON OUTRIGGERS AND STABILIZERS EXTENDED AND SET WITH MACHINE LEVELED.
3. LOAD RATINGS ABOVE THE HEAVY LINE ARE STRUCTURALLY LIMITED CAPACITIES. LOAD RATINGS BELOW THE HEAVY LINE ARE STABILITY LIMITED CAPACITIES AND DO NOT EXCEED 85% OF TIPPING.

**DEFINITIONS**

1. OPERATING RADIUS IS THE HORIZONTAL DISTANCE FROM THE AXIS OF ROTATION TO THE CENTER OF THE VERTICAL HOIST LINE OR TACKLE WITH LOAD APPLIED.
2. LOADED BOOM ANGLE AS SHOWN IN THE COLUMN HEADED BY  $\alpha$ , IS THE INCLUDED ANGLE BETWEEN THE HORIZONTAL AND LONGITUDINAL AXES OF THE BOOM BASE AFTER LIFTING RATED LOAD AT RATED RADIUS.

**ALLOWABLE LINE PULL**

1 PART LINE	2 PART LINE	3 PART LINE	4 PART LINE	5 PART LINE	6 PART LINE	7 PART LINE	<b>WARNING</b>
8500 LBS	17000 LBS	25500 LBS	34000 LBS	42500 LBS	51000 LBS	56000 LBS	
7400 LBS	14800 LBS	22200 LBS	29600 LBS	37000 LBS	44400 LBS	51800 LBS	<p>9/16" 6X25 IWRC (3.5:1 SF) - 29750 LBS MIN BREAKING STRENGTH</p> <p>9/16" ROT RESISTANT (5.0:1 SF) - 37000 LBS MIN BREAKING STRENGTH</p>

**DEDUCTIONS FROM RATED LOADS FOR LOAD HANDLING DEVICES SUPPLIED BY MANITEX**

AUXILIARY BLOCK	50 LBS
AUXILIARY SHEAVE	50 LBS
OVERHAUL BALL	SEE OVERHAUL BALL MFGR. NAMEPLATE
LOAD BLOCK	SEE BLOCK MFGR. NAMEPLATE
HOSE REEL	140 LBS
SWING AROUND JIB	SEE LOAD CHART

**WARNING**

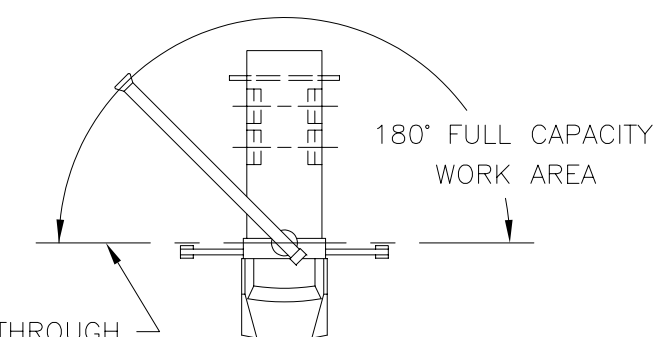
LIFTING OFF THE MAIN BOOM POINT WHILE THE SWING AROUND JIB IS ERECTED IS NOT INTENDED OR APPROVED.



**MODELS**  
**2892C & 2892T**

CRANE MEETS ANSI B30.5 REQUIREMENTS

7300089-003 NR



**AREA OF OPERATION**