SANY AMERICA INC.

SRC840

Rough Terrain Crane

- 40 U.S. Tons (36 Metric Tons) @ 10 ft Radius
- 103.4 ft, 4 Section Main Boom
- 26 ft – 45 ft Boom Extension

Product Guide

OPERATOR'S CAB

Spacious ergonomic cab with all steel construction. Optimum visibility, tinted safety glass throughout. Opening skylight with visor and wiper system. Sliding door on the left hand side and a framed sliding window on the right hand side. Acoustical foam to absorb noise and insulate the cab. Deluxe six-way adjustable seat is equipped with mechanical suspension and includes arm rests and head rest.

SANY DESIGNED LOAD MOMENT LIMITER (LML)

The user friendly SANY designed LML is prominently displayed, simple to set up and operate and full machine diagnostic capabilities.

HIGH QUALITY, NAME BRAND COMPONENTS

Cummins engine coupled to **Parker** & **Husco** hydraulic components and **Braden Winches** deliver high reliability and consistent performance.

SRC840

- Engine: Cummins Model QSB6.7 160 HP @ 2500 rpm
- Hydraulic system: Parker piston pump and Husco valves
- Braden winches
- SANY designed LML with large display screen
- AxleTech axles and Dana Powershift transmission
- 103 ft, Four Section Main Boom and 26' – 45' Extension
- *Key Features:*
  - Large Cab
  - Horsepower Limited Pump
  - Hydraulic Joystick Controls
  - Post Compensated Valves
  - SANY 24 Volt Electrical Control System

Maximum Capacity @ Radius	40 U.S. Ton @ 10 ft
Main Boom	32.8 ft – 103.4 ft
Max Tip Height w/Extension	155.5 ft
Boom Extension	26 ft – 45 ft
Hoist Max Line Pull	15,000 lb
Wire Rope Diameter	5/8 in
Weight	71,209 lb
Length	39 ft 10.5 in
Height	11 ft 2 in
Width	8 ft 7.5 in
Max Gradeability	100% GVW
Tail Swing	12 ft 11 in

ENGINE
Cummins Model QSB6.7 Tier 3
Power.....160 HP (119 Kw)
Fuel Tank .....75 Gal. (284L)

SWING SYSTEM
The swing system can rotate 360 degrees continuously in both directions. Independent swing circuit eliminates function interaction. Planetary drive offers free swing or automatic brake application for operator preference. Maximum speed 2.7 RPM with a 12 ft 11 in tailswing.

HYDRAULIC SYSTEM
Parker horsepower limited piston pump with Husco post compensated valves provides multifunction load sharing and fine control. Energy saving system offers a lower operational cost. Oil cooler and pressure filter to ensure long component life.

HOISTS
Braden main and auxiliary hoists are independently driven and controlled by the joysticks.
Rope Diameter ..... 5/8"
Max Line Speed ..... 460 ft/min
Max Line Pull 15000
Drum Capacity ..... 770 ft

CONTROLS
Hydraulic pilot operated joysticks produce smooth variable control of crane functions. Drum rotation indicators are incorporated in the handles. Steering column mounted turn signals and transmission control. Foot pedals for swing brake, telescope, service brake and accelerator. Hi-Low hoist speed control switch in handle for ease of use. SANY electrical system includes LML and lockout with CAN bus for reduced complexity. Built in diagnostics and engine instrumentation display. Electrical system is 24 volt.

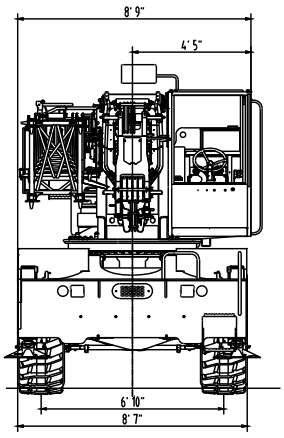
COUNTERWEIGHT
Fixed 8,818 pound counterweight.

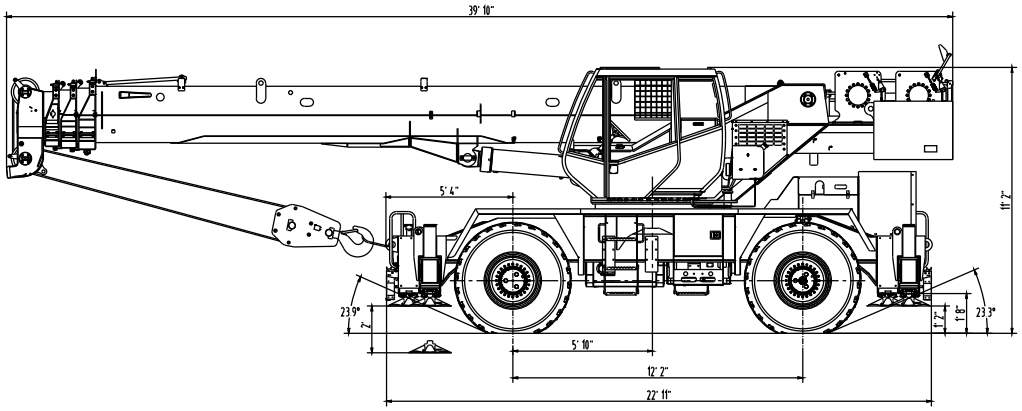
OPERATOR'S CAB
Spacious ergonomic cab with all steel construction. Optimum visibility, tinted safety glass throughout. Opening skylight with visor and wiper system. Diesel heater and defroster. Air conditioning standard in all crane cabs. Sliding door on the left hand side and a framed sliding window on the right hand side. Deluxe six-way adjustable seat is equipped with mechanical suspension and includes arm rests and head rest.

BOOM
Four section sequenced synchronized full power boom.

(32.8' – 103.4') Boom elevation -2° to 78° with a maximum tip height of 111 ft. Side mounted bifold boom extension (26' – 45') with 0°, 15°, and 30° offset. Maximum tip height of 155.5 ft.

CARRIER
Equipped with hydraulic powered four way steering for excellent maneuverability. Three position outriggers provide 10" of ground penetration and 20.2 ft of extension to level the crane. Superior accessibility from ground for ease of maintenance. Earthmover style 20.5 X 25 tires provide excellent flotation for off road use. Dana powershift transmission includes 6 speeds forward and reverse with a maximum speed of 25 MPH. AxleTech drive steer axles are supplied with hydraulic disk brakes and a spring applied parking brake.





Anti-Two-Block (A2B)
A limit switch and an actuation weight on load lines are provided to prevent two-blocking of the hook block and the overhaul ball. When the lifting hook reaches its maximum height, a limit switch will activate the buzzer on the control panel, meanwhile the indicator light will blink and automatically stop the lifting operation of hook block.

Backup Alarm
A backup alarm will operate when the machine is placed in reverse.

Crane Level Indicator
A bubble level displaying the machine angle is mounted in the operators cab.

Boom Angle Indicator
The boom angle is displayed on the LML console.

Boom Length Indicator
A cable reel is provided to measure the boom length and it is displayed on the LML console.

Load Holding Valves
Load holding valves are provided on all cylinders that support the load to prevent uncontrolled lowering of the boom in the event of a hydraulic system failure (e.g., supply hose rupture).

Load Moment Limiter (LML)
A Load Moment Limiter (LML) system is supplied to monitor the hook load and compare it with the rated load for the configuration selected by the operator.

Outrigger Jack Integral Holding Valve
All four outrigger jacks are supplied with an integral holding valve to prevent cylinder retraction in the event of a hose failure.

Outrigger Position Sensor
Each outrigger beam is supplied with a position sensor to monitor the extension of the outrigger beams.

Hoist Drum Rotation Indicator
All drums are equipped with an electric drum rotation indicator device that will vibrate the operator's joystick as the drum rotates.

Horn
The crane is supplied with a horn for the operator to warn personnel in the vicinity of the crane..

Drum Brake
All hoist drums are equipped with a spring applied hydraulic released brake. The brake will automatically apply when the control handle returns to neutral.

Lighting
Equipped with driving lights in front of machine, stop turn & tail lights in the rear of the machine, operator's cab interior light, and a spot light mounted on the front of the cab.

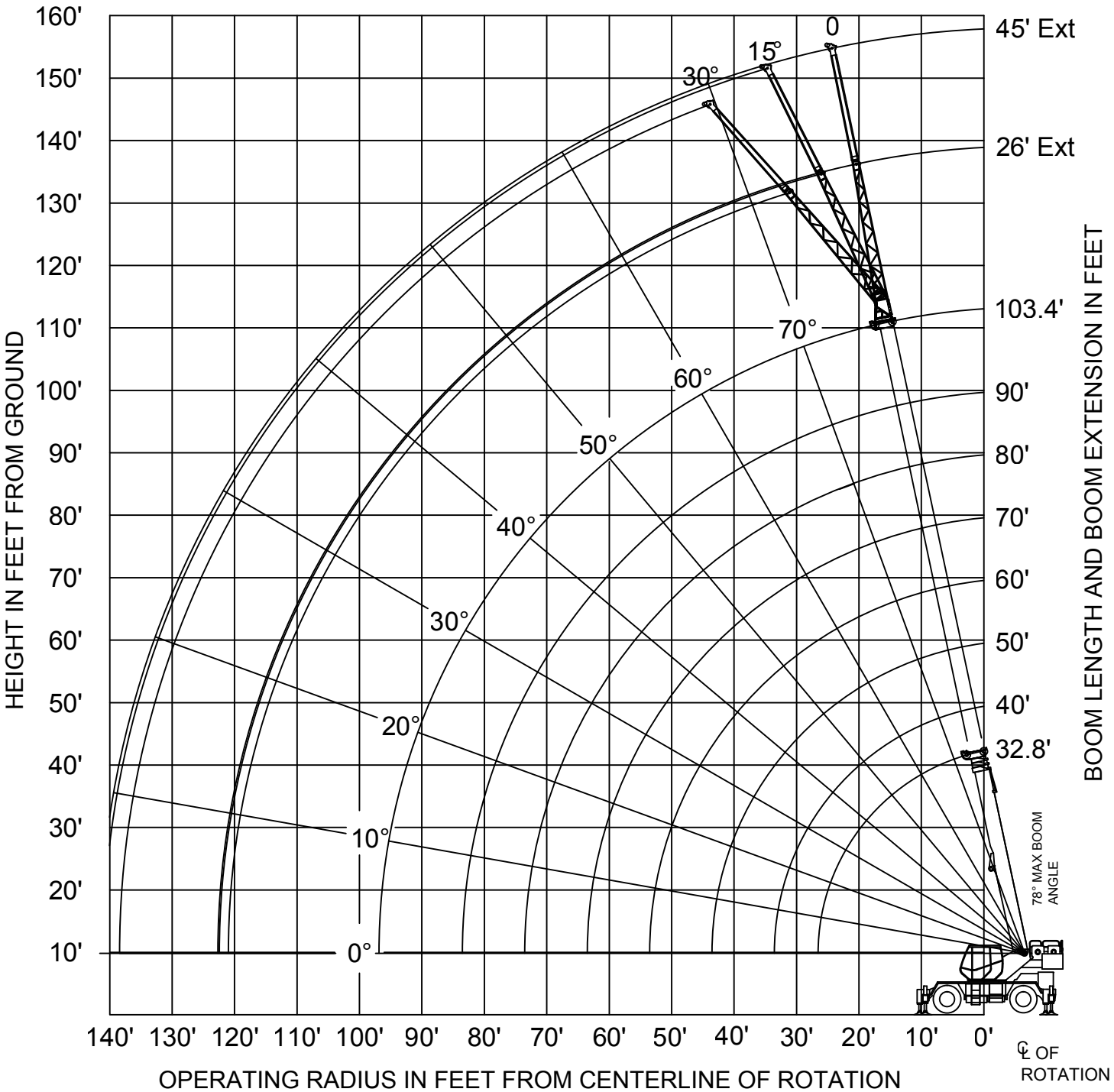
Rearview Mirror
Externally installed on the left of the operator's cab for monitoring the rear of the machine.

Swing Lock
Hydraulic pin lock to lock the crane in front positions.

Seat Switch
The operator must be seated for all machine functions to work.

Third Wrap Indicator
A roller riding on the hoist wire rope will actuate a switch to warn the operator when 3 wraps are remaining. The system will sound a buzzer and an alarm indicator will be displayed on the instrument cluster and automatically stop the drum movement.

WORKING RANGE DIAGRAM
(BOOM DEFLECTION NOT SHOWN)
SANY SRC840



SRC840 MAIN BOOM - ON OUTRIGGERS - FULLY EXTENDED, 360°

 Main Boom  Outriggers Fully Extended  360°

RADIUS FT	Boom Length - Feet							
	32.8	40	50	60	70	80	90	103.4
10	80000 (65)	50690 (70)	48720 (74.5)					
12	69680 (61)	50690 (67)	48720 (72.5)	46400 (75.5)				
15	55990 (54.5)	48390 (62)	44090 (68.5)	41880 (72.5)	40630 (75.5)			
20	40120 (41.5)	36740 (53)	35270 (62)	34830 (67.5)	32540 (71)	31180 (74)	22920 (76)	
25	30040 (21.5)	28130 (42.5)	26790 (55)	28760 (62)	27080 (66.5)	25820 (70.5)	20720 (73)	18950 (76)
30		22310 (28.5)	20130 (47)	22940 (56)	22880 (62)	21830 (66.5)	18180 (69.5)	17410 (73)
35			15670 (38)	18790 (50)	18950 (57)	18680 (62.5)	15650 (66)	15540 (70)
40			12480 (25.5)	15170 (43)	15380 (52)	15530 (58.5)	13880 (62.5)	13660 (67)
45				12230 (34.5)	12380 (46)	12490 (54.5)	12320 (58.5)	12160 (64)
50				9870 (23)	10160 (39.5)	10250 (49.5)	10270 (54.5)	10270 (60.5)
55					8320 (32)	8480 (44)	8500 (50.5)	8530 (57)
60					6820 (23)	7050 (38)	7090 (45.5)	7140 (53.5)
65						5820 (30.5)	5950 (41)	5990 (50)
70						4800 (21)	4980 (35)	5020 (46)
75							4100 (28.5)	4230 (41.5)
80							3370 (19.5)	3520 (36.5)
85								2860 (31.5)
90								2310 (24.5)
95								1800 (14.5)
MIN BOOM ANGLE	0°	0°	0°	0°	0°	0°	0°	0°
PARTS LINE	8	6	6	4	4	4	4	3

Boom Angle	Main Boom Length - Feet							
	32.8	40	50	60	70	80	90	103.4
0°	25350 (26.5)	18730 (33.7)	12670 (43.7)	8520 (53.7)	5930 (63.7)	4180 (73.7)	2900 (83.7)	1660 (96.8)

Number in parentheses **( )** is the Boom Angle in Degrees.
***** This rated load is with the boom at the maximum boom angle.

* This chart is only a guide and should never be used to operate the crane!

SRC840 MAIN BOOM - ON OUTRIGGERS - 50% EXTENDED, 360°

 Main Boom  Outriggers 50% Extended  360°

RADIUS FT	Boom Length - Feet							
	32.8	40	50	60	70	80	90	103.4
10	77160 (65)	50690 (70)	48720 (74.5)					
12	66240 (61)	50690 (67)	48720 (72.5)	46400 (75.5)				
15	48500 (54.5)	41880 (62)	40120 (68.5)	38580 (72.5)	40630 (75.5)			
20	29980 (41.5)	30090 (53)	30200 (62)	30640 (67.5)	31080 (71)	31180 (74)	22920 (76)	
25	19390 (21.5)	20310 (42.5)	21150 (55)	21720 (62)	22120 (66.5)	22440 (70.5)	19620 (73)	18950 (76)
30		14240 (28.5)	15000 (47)	15520 (56)	15880 (62)	16160 (66.5)	16090 (69.5)	15650 (73)
35			11050 (38)	11530 (50)	11870 (57)	12130 (62.5)	12330 (66)	12540 (70)
40			8300 (25.5)	8750 (43)	9080 (52)	9330 (58.5)	9520 (62.5)	9710 (67)
45				6710 (34.5)	7020 (46)	7260 (54.5)	7440 (58.5)	7630 (64)
50				5140 (23)	5440 (39.5)	5670 (49.5)	5840 (54.5)	6030 (60.5)
55					4190 (32)	4410 (44)	4580 (50.5)	4760 (57)
60					3170 (21.5)	3390 (38)	3560 (45.5)	3730 (53.5)
65						2550 (30.5)	2710 (41)	2880 (50)
70						1840 (21)	2000 (35)	2160 (46)
75							1390 (28.5)	1550 (41.5)
MIN BOOM ANGLE	0°	0°	0°	0°	0°	0°	22°	35°
PARTS LINE	8	6	6	4	4	4	4	3

Boom Angle	Main Boom Length - Feet					
	32.8	40	50	60	70	80
0°	17110 (26.5)	10650 (33.7)	6330 (43.7)	3760 (53.7)	2150 (63.7)	1330 (73.7)

SRC840 MAIN BOOM - ON OUTRIGGERS RETRACTED, 360°

 Main Boom  Outriggers Retracted  360°

RADIUS FT	Boom Length - Feet							
	32.8	40	50	60	70	80	90	103.4
10	52020 (65)	50040 (70)	48720 (74.5)					
12	34130 (61)	35320 (67)	36410 (72.5)	37150 (75.5)				
15	22670 (54.5)	23690 (62)	24620 (68.5)	25250 (72.5)	25700 (75.5)			
20	13080 (41.5)	13950 (53)	14740 (62)	15280 (67.5)	15660 (71)	15950 (74)	16180 (76)	
25	8040 (21.5)	8830 (42.5)	9550 (55)	10040 (62)	10390 (66.5)	10650 (70.5)	10850 (73)	11060 (76)
30		5670 (28.5)	6350 (47)	6810 (55)	7130 (62.5)	7380 (66.5)	7570 (69.5)	7760 (73)
35			4180 (38)	4620 (47)	4930 (57)	5160 (62.5)	5340 (66)	5530 (70)
40			2620 (25.5)	3030 (38)	3330 (52)	3560 (58.5)	3730 (62.5)	3910 (67)
45				1840 (25.5)	2130 (46)	2350 (54.5)	2510 (58.5)	2690 (64)
50					1180 (39.5)	1400 (50.5)	1560 (54.5)	1730 (60.5)
MIN BOOM ANGLE	0°	0°	0°	23°	36°	44°	49°	55°
PARTS LINE	6	6	6	4	4	4	4	3

Boom Angle	Main Boom Length - Feet		
	32.8	40	50
0°	6940 (26.5)	3970 (33.7)	1640 (43.7)

Number in parentheses **( )** is the Boom Angle in Degrees.
***** This rated load is with the boom at the maximum boom angle.

* This chart is only a guide and should never be used to operate the crane!

SRC840 - LOAD STATIONARY, ON TIRES, 360°				
Stationary On Tires		360°		
RADIUS FT	Boom Length - Feet			
	32.8	40	50	60
10	24040 (66)	24090 (71.5)	22990 (76)	
12	19630 (62)	20040 (68)	19630 (73.5)	
15	15240 (55.5)	15540 (63)	16090 (70)	13890 (74)
20	8730 (42.5)	9370 (54)	9850 (63.5)	9850 (68.5)
25	4820 (23)	5560 (44.5)	6240 (56.5)	6500 (63.5)
30		3090 (30.5)	3730 (48.5)	4160 (57.5)
35			2010 (39.5)	2420 (51)
40				1160 (44)
MIN BOOM ANGLE	0°	0°	0°	31°
PARTS LINE	4	4	4	4

Boom Angle	Main Boom Length - Feet	
	32.8	40
0°	4090 (26.5)	1850 (33.7)

NOTES TO ALL ON TIRE CAPACITY CHARTS:

1. Capacities are in pounds and do not exceed 75% of tipping loads as tested in accordance with SAE J765.
2. Capacities are applicable to machines equipped with 20R25 - ** Bridgestone radial tires at 75 psi cold inflation pressure.
3. Capacities appearing above the bold line are based on structural strength and tipping should not be relied upon as a capacity limitation.
4. Capacities are applicable only with machine on firm level surface.
5. On tire lifting with the boom extensions is not permitted.
6. For pick and carry operation, boom must be centered over the front of the machine with the swing lock engaged and the load restrained from swinging.
7. Axle lockouts must be functioning when lifting on tires.
8. All lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation pressures. See lifting capacity information for tire used. Damaged tires are hazardous to safe operation of crane.

SRC840 - LOAD STATIONARY, OVER FRONT TIRES, 360°				
Stationary On Tires		Over Front Tires		
RADIUS FT	Boom Length - Feet			
	32.8	40	50	60
10	31010 (66)	31600 (71.5)	32130 (76)	
12	26620 (62)	27150 (68)	27670 (73.5)	
15	21590 (55.5)	22110 (63)	22630 (70)	22970 (74)
20	15860 (42.5)	16370 (54)	16880 (63.5)	17210 (68.5)
25	12030 (23)	12520 (44.5)	13020 (56.5)	13350 (63.5)
30		8970 (30.5)	9530 (48.5)	9910 (57.5)
35			7030 (39.5)	7380 (51)
40			5260 (26.5)	5590 (44)
45				4260 (36)
50				3240 (24.5)
MIN BOOM ANGLE	0°	0°	0°	0°
PARTS LINE	4	4	4	4

Boom Angle	Main Boom Length - Feet			
	32.8	40	50	60
0°	10990 (26.5)	7190 (33.7)	4320 (43.7)	2260 (53.7)

SRC840 - LOAD PICK & CARRY ON TIRES				
Pick & Carry On Tires		Over Front Tires		
RADIUS FT	Boom Length - Feet			
	32.8	40	50	60
10	27140 (66)	26890 (71.5)		
12	23340 (62)	23240 (68)		
15	18940 (55.5)	19090 (63)	19390 (70)	
20	13690 (42.5)	14190 (54)	14490 (63.5)	14540 (68.5)
25	10090 (23)	10740 (44.5)	11140 (56.5)	11190 (63.5)
30		7950 (30.5)	8610 (48.5)	8780 (57.5)
35			5920 (39.5)	6350 (51)
40			4020 (26.5)	4430 (44)
45				3000 (36)
50				1890 (24.5)
MIN BOOM ANGLE	0°	0°	0°	0°
PARTS LINE	4	4	4	4

Boom Angle	Main Boom Length - Feet			
	32.8	40	50	60
0°	9710 (26.5)	6960 (33.7)	4120 (43.7)	2160 (53.7)

Number in parentheses **( )** is the Boom Angle in Degrees.
***** This rated load is with the boom at the maximum boom angle.

* This chart is only a guide and should never be used to operate the crane!

SRC840 - BOOM EXTENSION, 360°						
 Boom Extension			 360°			
BOOM ANGLE	26 ft			45 ft		
	OFFSET ANGLE			OFFSET ANGLE		
	0°	15°	30°	0°	15°	30°
	lbs	lbs	lbs	lbs	lbs	lbs
25	10210					
30	10210	7940		5320		
35	9730	7540	5990	5320		
40	8990	7170	5800	5320	4210	
45	8370	6850	5620	5320	4000	
50	7820	6550	5450	5320	3900	3150
55	7340	6280	5300	4960	3730	3050
60	6920	5900	5160	4640	3560	3000
65	6300	5600	4950	4350	3420	2920
70	5450	5200	4700	4100	3280	2840
75	4640	4700	4300	3880	3160	2760
80	3960	4220	3900	3680	3040	2700
85	3360	3590	3450	3400	2940	2630
90	2840	3040	3050	3090	2840	2570
95	2380	2550	2660	2700	2750	2520
100	1970	2120	2200	2300	2500	2470
105	1610	1730	1790	2000	2140	2360
110	1290	1380	1410	1650	1770	2050
115				1340	1440	1720
120						1200
MIN BOOM ANGLE	32°	34°	35°	34°	37°	39°

* This rated load is with the boom at the maximum boom angle.

WARNING: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning.

1. Capacities above the bold line are based on the structural strength of the boom extension.
2. The capacities listed are with the outriggers fully extended and vertical jacks properly set only.
3. The boom extension may only be used for single line lifting service.
4. Use only the load which corresponds to the boom extension length and offset angle as the machine is configured.
5. For main boom lengths less than fully extended with the boom extension erected, the boom extension rated loads are determined by the boom angle not the radius.
6. For boom angles not shown, use the rating of the next lower boom angle.
7. The boom angle is defined as the angle above or below the horizontal line of the longitudinal axis of the boom base section after lifting the rated load.
8. When lifting over the main boom nose with the boom extension erected, the outriggers must be fully extended and the proper load reduction must be used.
9. Do not lower the boom below the Minimum Boom Angle with the extension erected. Fully retract the boom to lower the boom below the Minimum Boom Angle.

* This chart is only a guide and should never be used to operate the crane!

SRC840-031913

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