



SkyCrane

SC series

Aerial Lifts and Cranes

features

- Working Heights to 97'
- Dual purpose machine; aerial platform and crane
- Multiple tool and lamp box options
- Extra long lamp box option in sub-frame
- Easy ground level entry to Aerial platform
- Aerial remote controls
- Ground hydraulic controls
- Remote engine start / stop
- Auxiliary power unit
- Hydraulic and Gravity leveled platforms
- Platform Mounted Jib with Hydraulic Winch
- 360° Work Area
- Continuous Rotation
- Crane Tip Heights: 57', 60', 70', 85' & 92'
- Nylatron pad equipped booms
- Up to 6,000 lb lift capacity
- Up to 24,000 lb lift capacity for SC 85
- Detachable load line
- Radio anti-two block system
- Rugged, Weatherproof, Automotive style electrical system
- ORS Face Seal hydraulic fittings and adapters
- Unparalleled machine stability
- Heavy duty sub-frame
- Clamp-on mounting
- Design meets ANSI A92.2 and ANSI B30.5 recommendations



product guide

SkyCrane series

GENERAL SPECIFICATIONS

BOOM

Boom Sections - 4-plate design, telescopic booms equipped with teflon-plugged nylatron wear pads for smooth operation. Nylatron wear pads easily accessible for lubrication, inspection and replacement.

3-section booms extend and retract by internal telescoping hydraulic cylinder.

4-section boom telescope system consists of a telescoping cylinder and wire rope crowds.

Boom Point - Boom tip designed to easily accept Manitex Skycrane platforms. Detachable boom point sheave bracket (except SC 85) allows for easy removal and stowage of load line for aerial platform operation.

SC 85 only, "Quick Reeve" boom point design, accepts Manitex Skycrane platforms; facilitates parts of line configuration changes.

Boom Elevation - Double acting hydraulic cylinder; working range from 15° below horizontal to 85° above. Counterbalance valves hold cylinder and boom in position.

HOIST

Winch - Single or two speed planetary winch; wet multi-disc internal brake, spring applied, hydraulically released.

	SC62, SC65, SC75	SC85	SC97
Max Line Pull	5376 lb	7789 lb	5750 lb
Max Line Speed	78*	106*	333*
Rope Capacity	138 ft	219 ft	243 ft

*ft/min

Wire Rope - 3/8" or 1/2" diameter 6 x 25 IWRC wire rope.

Anti-two block - Wireless radio anti-two block system includes switch and receiver. Conforms to ANSI B30.5.

SWING SYSTEM

Swing Drive - Externally mounted single reduction worm gear swing drive; directly driven by a high-torque, low-speed hydraulic motor for smooth, controlled, operation. Swing speed is directly proportional by position of control lever.

Rotation - All SC series machines are equipped with hydraulic and electric swivels that allow continuous rotation in either direction.

OUTRIGGERS

Front and Rear Outriggers - Fully hydraulic outriggers extend to maximum overall spread for unparalleled machine stability. All cylinders equipped with check or counterbalance valves to ensure outriggers remain in position at all times. Jack cylinders operate independently for precise leveling; bubble level located near outrigger controls.

	SC62, SC65	SC75, SC85, SC97
Front Spread	10' opt	19' 9-3/4"
Rear Spread	18'6"	18'6"

MOUNTING

In true Manitex tradition, these machines are clamp mounted and require no drilling or welding to the truck chassis. This system allows for greater flexibility when positioning the machine on the chassis thus allowing the installer the ability to maximize available axle capacity.

Subframe - All SC series machines are equipped with a torsionally resistant, 4-plate, fabricated subframe that extends over the entire length of the truck chassis. The SC75, SC85 & SC97 sub-frame is fabricated with an integral outrigger base; this outrigger design further enhances the superior stability of the Manitex Skycrane.

Pedestal - Clamp mounted to the sub-frame and truck chassis with threaded rods and chassis clamp brackets.

Boom Rest - Heavy-duty fabricated boom rest secures boom in place when traveling.

BASKETS AND WORK PLATFORMS

Basket (standard) - One-man aluminum, gravity leveled basket. Equipped with safety lanyard anchor points; full body harness and lanyard for included. Basket is secured and cushioned by manual friction brakes and shock absorbers. Basket capacity is 300 lbs.

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

CONTROL SYSTEM

Outriggers - Valve mounted at the rear of the truck allows visibility to all outriggers for easy set-up.

Base station - Mounted on the curbside of the Turret, a four spool proportional control hydraulic valve operates the basic crane functions; elevation, rotation, telescope and loadline hoist. Controls for engine ignition start, throttle advance and emergency stop are also provided. Controls for the self leveling platform and hydraulic Jib winch added when appropriate.

Aerial platform - Platforms are equipped with a wired remote control system. The control box is fitted with electric joysticks to operate boom elevation, telescope, and rotation; basket control and Jib winch control. Switches for engine start/stop, emergency stop button, throttle advance, auxiliary pump is standard, optional generator start switch is also included when appropriate.

HYDRAULIC SYSTEMS

64 gallon tank fitted with 10 micron high pressure and return filters, gear pump variable to 20 GPM, 3000 maximum operating pressure at high engine speed.

GENERAL

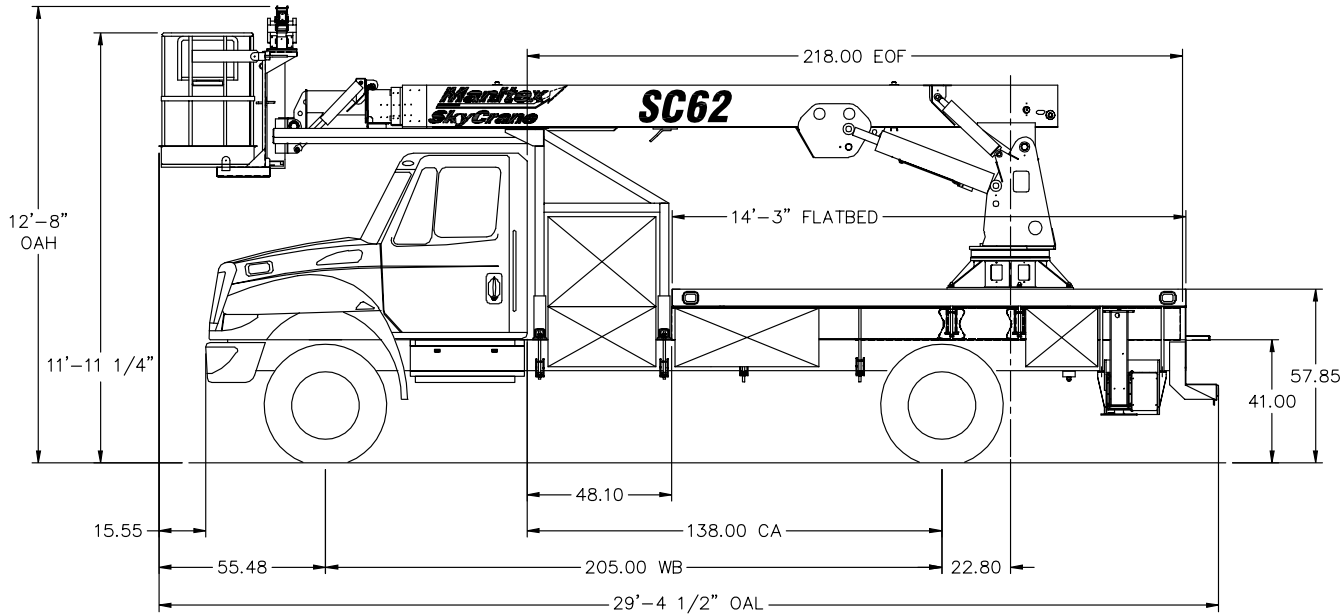
Electrical - Connectorized automotive style electrical system is state-of-the-art, fitted with rugged, weather proof components throughout.

Design/Welding - Welding conforms to AWS D1.1. Design conforms to ANSI B30.5 (mobile cranes) and ANSI 92.2 (aerial devices).

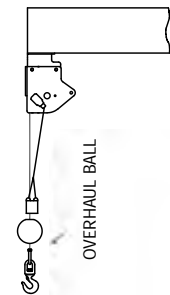
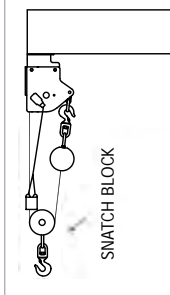
Paint - Standard Manitex blue and gray.

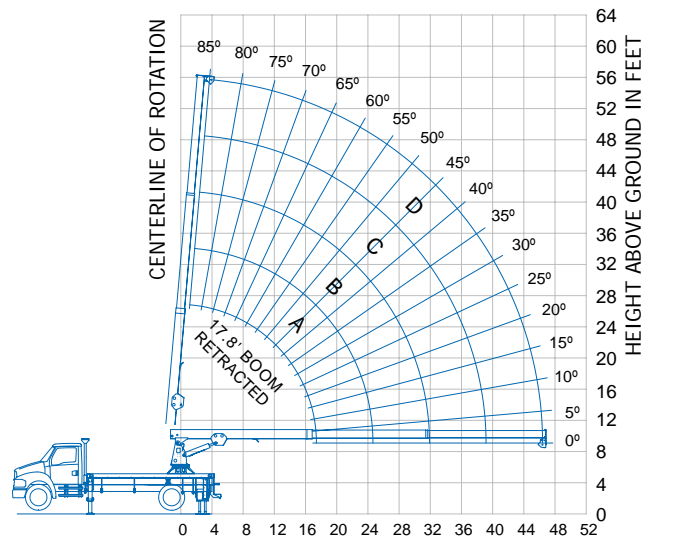
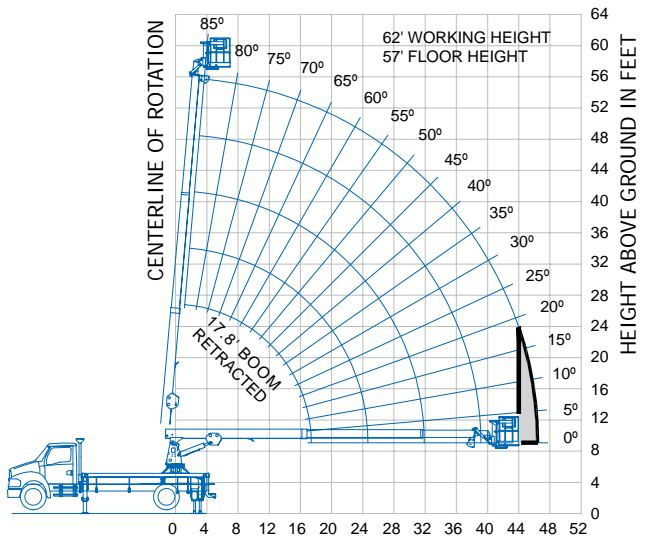
Manuals - Operator and parts manuals depict correct machine operation, maintenance procedures and parts listings

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



DEDUCTIONS	
Overhaul Weight	40 lb
Snatch Block	40 lb
2-Manbasket SLR Platform	700 lb

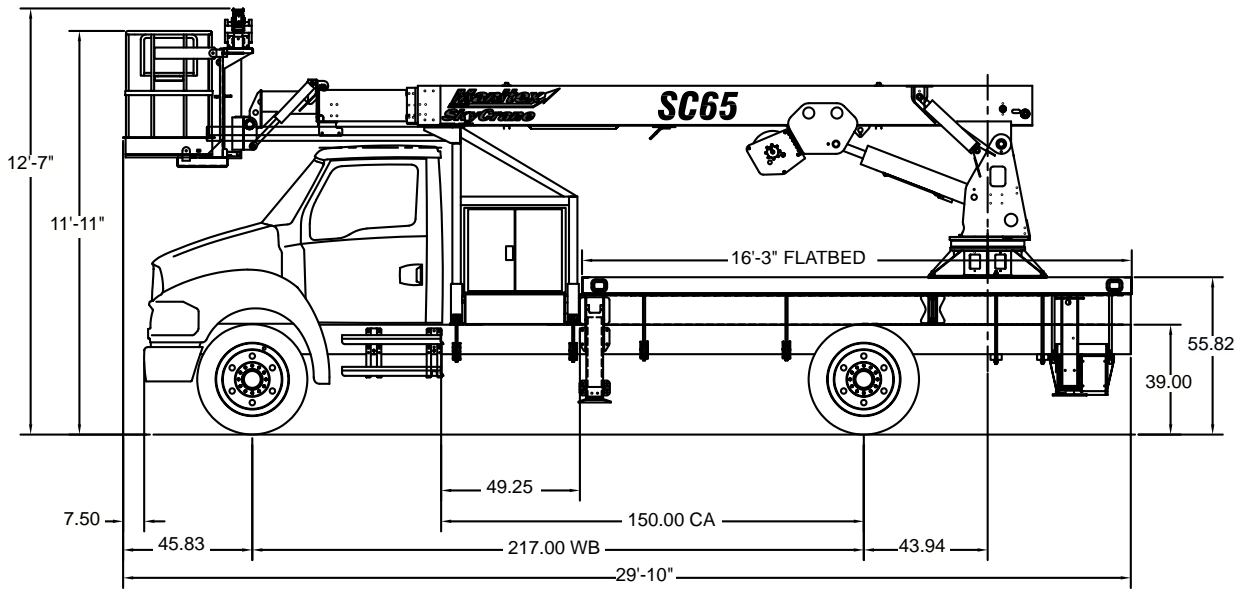
WEIGHTS		WARNING
1 Part Line	2 Part Line	
		<p>WARNING</p> <p>Anti-two-block system, if supplied, must be in good operating condition before operating crane.</p> <p>Refer to the owner's manual.</p> <p>Keep at least three wraps of load line on the drum at all times.</p>
3,500 lb	6,000 lb	
		3/8" 6 x 25 IWRC (3.5:1 SF) 13,120 lb min. breaking strength



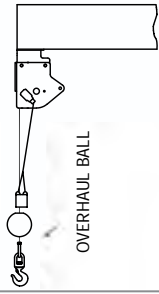
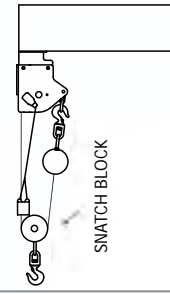
The Gray Area represents a "no work" zone, do not place the basket in this area.

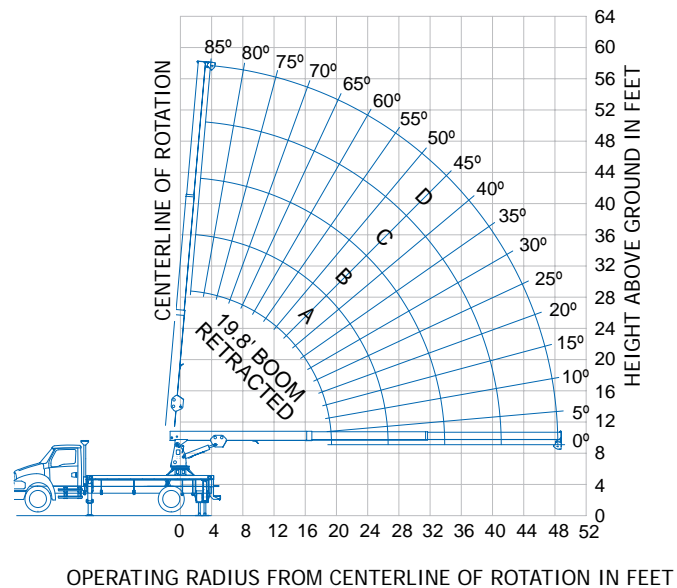
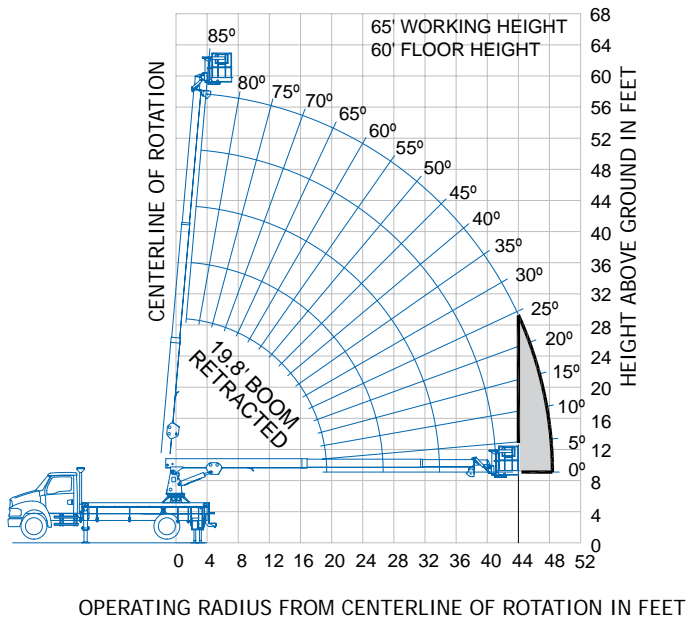
Meets ANSI B30.5 Requirements - Do not operate crane or accessories within 10' (3.05 m) of live power lines.
 NOTICE: This chart is for reference only and must not be used for lifting purposes. Consult factory for other boom options.

LOAD CHART FOR CRANE APPLICATIONS ONLY						
MAIN BOOM LOAD RATINGS IN LBS. WITH OUTRIGGERS FULLY EXTENDED						
	Boom Length	A	B	C	D	
Operating Radius	17.8 Feet	25.1 Feet	32.3 Feet	39.6 Feet	46.8 Feet	
Feet	∠ lb.	∠ lb.	∠ lb.	∠ lb.	∠ lb.	∠ lb.
8	63° 6,000	71° 6,000	76° 5,400			
10	55° 6,000	66° 5,150	72° 4,510	76° 4,220		
12	47° 5,710	61° 4,540	68° 3,900	73° 3,620	76° 3,420	
14	37° 5,260	56° 4,100	64° 3,460	70° 3,180	74° 2,990	
16	24° 4,920	50° 3,770	60° 3,120	67° 2,850	71° 2,650	
18		44° 3,510	56° 2,860	64° 2,590	69° 2,390	
20		37° 3,290	52° 2,650	60° 2,380	66° 2,180	
24		14° 2,940	42° 2,330	53° 2,060	60° 1,860	
28			29° 2,090	45° 1,830	54° 1,640	
32				36° 1,650	48° 1,460	
36				24° 1,510	41° 1,320	
40					32° 1,210	
44					20° 1,110	



DEDUCTIONS	
Overhaul Weight	40 lb
Snatch Block	40 lb
2-Manbasket SLR Platform	700 lb

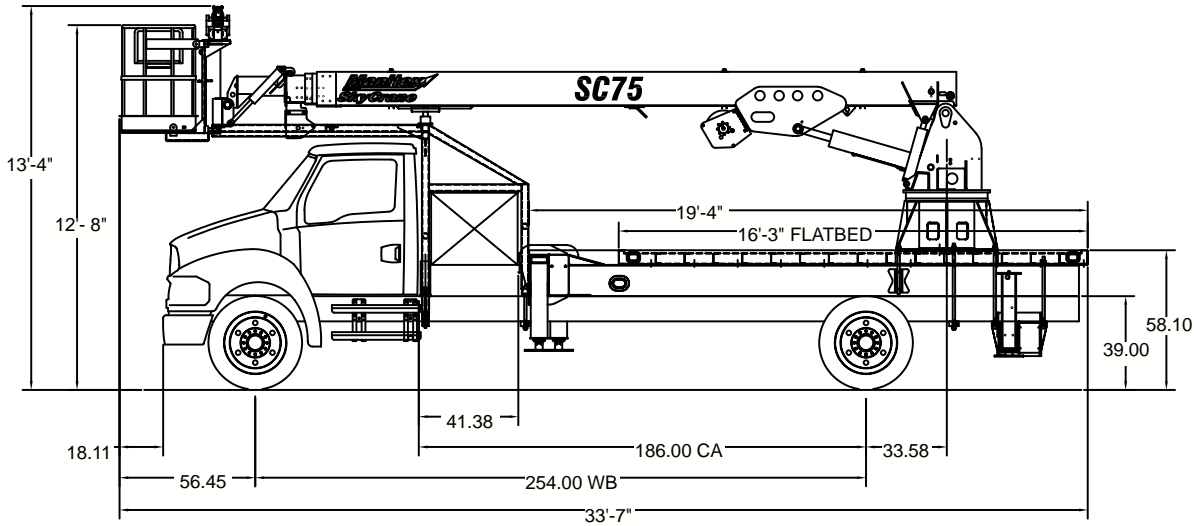
WEIGHTS		WARNING
1 Part Line	2 Part Line	
		<p>Anti-two-block system, if supplied, must be in good operating condition before operating crane.</p> <p>Refer to the owner's manual.</p> <p>Keep at least three wraps of load line on the drum at all times.</p>
3,500 lb	6,000 lb	



LOAD CHART FOR CRANE APPLICATIONS ONLY						
MAIN BOOM LOAD RATINGS IN LBS. WITH OUTRIGGERS FULLY EXTENDED						
	Boom Length	A	B	C	D	
Operating Radius	19.8 Feet	27.0 Feet	34.3 Feet	41.5 Feet	48.8 Feet	
Feet	∠ lb.	∠ lb.	∠ lb.	∠ lb.	∠ lb.	∠ lb.
8	66° 6,000	73° 5,910	77° 5,320			
10	59° 6,000	68° 5,020	73° 4,430	77° 4,170		
12	52° 5,420	64° 4,410	70° 3,820	74° 3,560	77° 3,380	
14	44° 4,980	59° 3,970	66° 3,380	71° 3,130	75° 2,940	
16	35° 4,640	54° 3,640	62° 3,050	68° 2,790	72° 2,610	
18	23° 4,360	48° 3,370	58° 2,790	65° 2,530	70° 2,350	
20		42° 3,160	54° 2,580	62° 2,320	67° 2,140	
24		26° 2,830	45° 2,250	55° 2,000	62° 1,820	
28			35° 2,020	48° 1,770	56° 1,590	
32			20° 1,830	40° 1,600	50° 1,420	
36				30° 1,460	43° 1,280	
40				15° 1,330	36° 1,170	
44					26° 1,080	
48					9° 970	

The Gray Area represents a "no work" zone, do not place the basket in this area.

Meets ANSI B30.5 Requirements - Do not operate crane or accessories within 10' (3.05 m) of live power lines.
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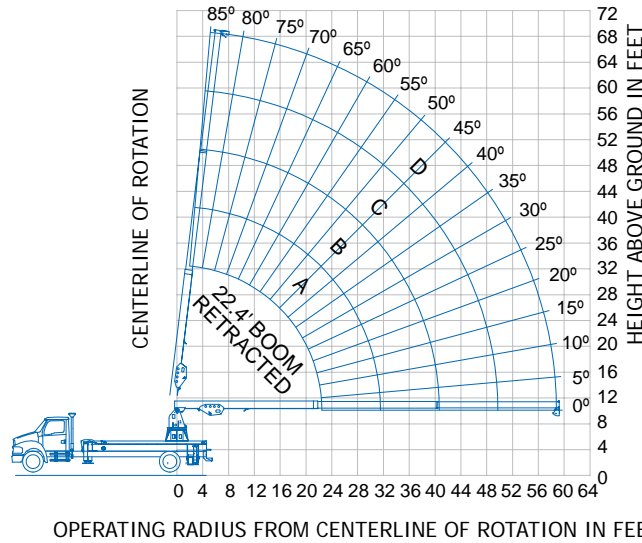
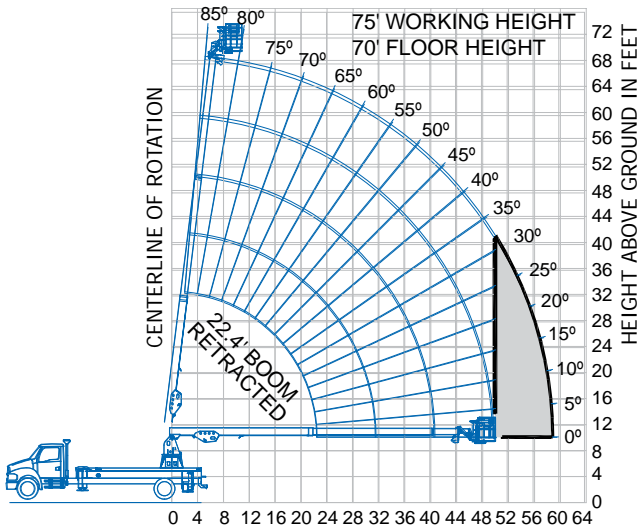


DEDUCTIONS

Overhaul Weight	40 lb
Snatch Block	40 lb
2-Manbasket SLR Platform	700 lb

WEIGHTS

1 Part Line	2 Part Line	WARNING
		<p>Anti-two-block system, if supplied, must be in good operating condition before operating crane.</p> <p>Refer to the owner's manual.</p> <p>Keep at least three wraps of load line on the drum at all times.</p>
3,500 lb	6,000 lb	
		<p>3/8" 6 x 25 IWRC (3.5:1 SF) 13,120 lb min. breaking strength</p>



OPERATING RADIUS FROM CENTERLINE OF ROTATION IN FEET

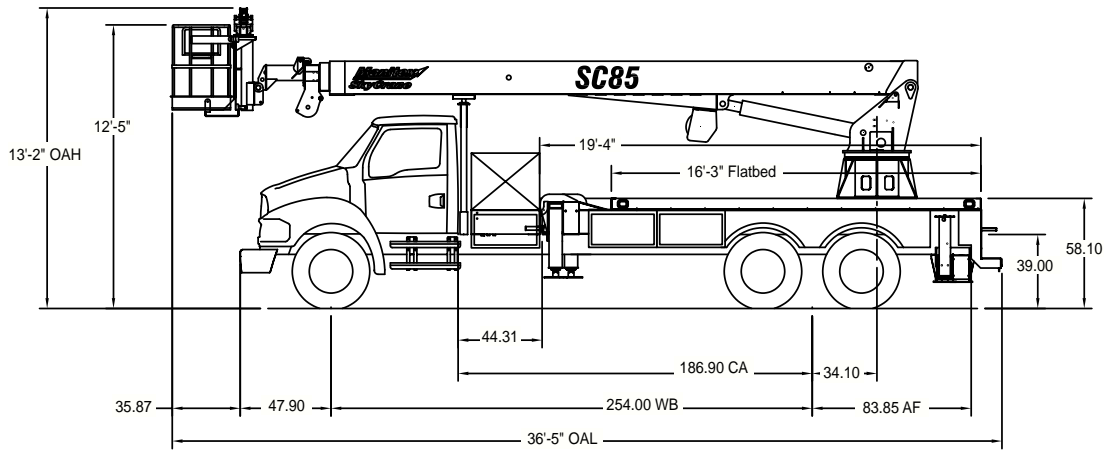
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LOAD CHART FOR CRANE APPLICATIONS ONLY

MAIN BOOM LOAD RATINGS IN LBS. WITH OUTRIGGERS FULLY EXTENDED

Operating Radius Feet	Boom Length	A	B	C	D
	22.4 Feet	31.5 Feet	40.6 Feet	49.7 Feet	58.8 Feet
Feet	∠ lb.	∠ lb.	∠ lb.	∠ lb.	∠ lb.
8	71° 5,450	77° 4,970	80° 4,500		
10	65° 5,360	73° 4,850	77° 4,350	80° 3,750	
12	60° 5,300	69° 4,750	74° 4,200	78° 3,600	80° 3,000
14	53° 5,190	65° 4,620	71° 4,050	75° 3,490	78° 2,930
16	46° 5,080	61° 4,490	68° 3,900	73° 3,380	76° 2,870
18	39° 4,980	57° 4,360	65° 3,750	70° 3,280	74° 2,810
20	29° 4,780	52° 4,180	62° 3,580	68° 3,160	72° 2,750
24		42° 3,780	55° 3,210	63° 2,910	68° 2,620
28		29° 3,380	48° 2,840	57° 2,670	64° 2,500
32			39° 2,360	52° 2,350	59° 2,350
36			29° 1,980	45° 2,020	54° 2,070
40			11° 1,620	38° 1,710	49° 1,800
44				29° 1,480	44° 1,580
48				17° 1,250	37° 1,290
52					30° 1,000
56					20° 800

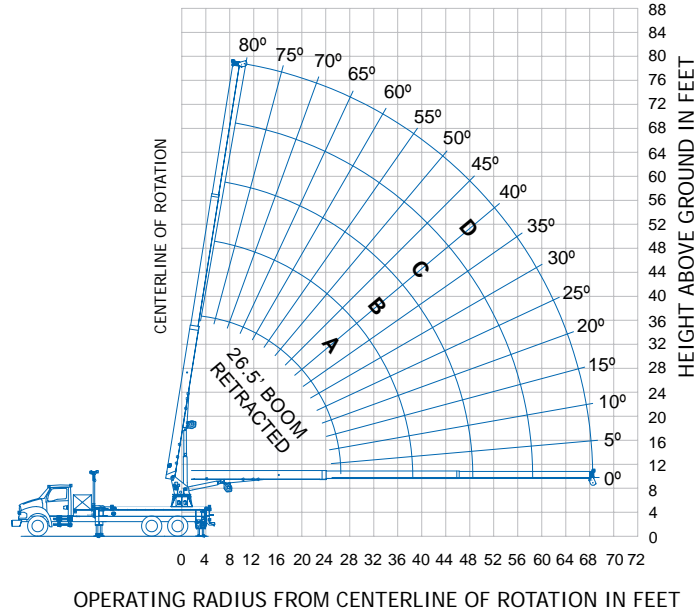
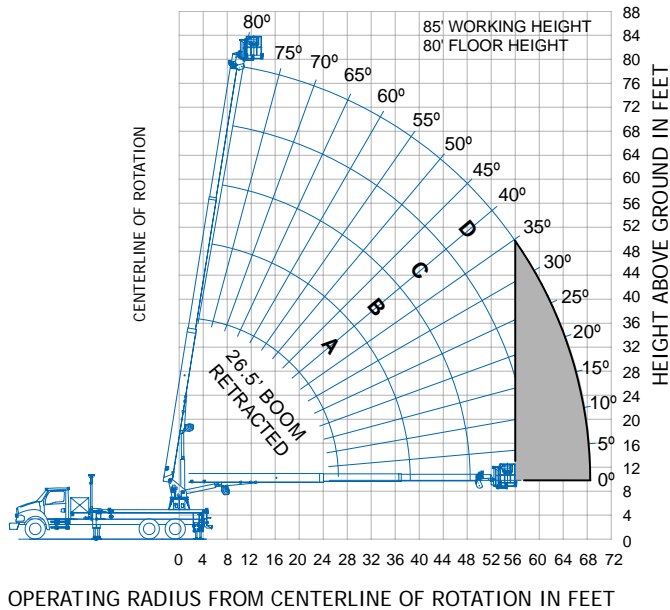


DEDUCTIONS

Overhaul Weight	See Manufacturer Nameplate
Snatch Block	See Manufacturer Nameplate
2-Manbasket SLR Platform	700 lb

WEIGHTS

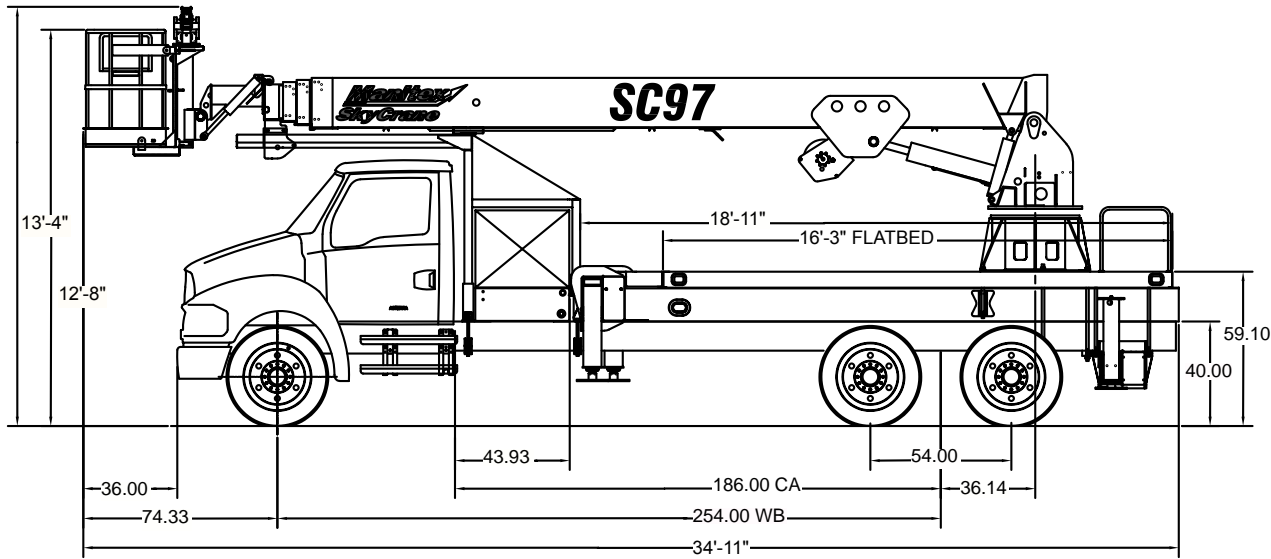
1 Part Line	2 Part Line	3 Part Line	4 Part Line	WARNING
				<p>Anti-two-block system, if supplied, must be in good operating condition before operating crane.</p> <p>Refer to the owner's manual.</p> <p>Keep at least three wraps of load line on the drum at all times.</p>
OVERHAUL BALL	SINGLE SHEAVE BLOCK	SINGLE SHEAVE BLOCK	DOUBLE SHEAVE BLOCK	
5,840 lb	11,680 lb	17,520 lb	23,360 lb	
6,000 lb	12,000 lb	18,000 lb	24,000 lb	



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MAIN BOOM LOAD RATINGS IN LBS. WITH OUTRIGGERS FULLY EXTENDED						
Operating Radius Feet	Boom Length	A	B	C	D	
	26.5 Feet	40 Feet	50 Feet	60 Feet	60 Feet	70 Feet
Feet	lb.	lb.	lb.	lb.	lb.	lb.
5	78° 24,000					
8	71° 17,030	78° 15,840				
10	67° 14,380	75° 13,230	78° 12,740			
12	62° 12,480	72° 11,370	76° 10,900	79° 10,570		
14	57° 11,040	69° 9,990	73° 9,520	77° 9,200	79° 8,960	
16	51° 9,880	66° 8,910	71° 8,460	75° 8,140	78° 7,900	
18	45° 8,910	63° 8,040	69° 7,600	73° 7,290	76° 7,060	
20	38° 8,040	59° 7,320	66° 6,900	71° 6,600	74° 6,370	
24	18° 6,180	52° 6,180	61° 5,810	67° 5,530	71° 5,310	
28		44° 5,300	55° 5,000	62° 4,730	67° 4,520	
32		35° 4,540	49° 4,350	58° 4,120	64° 3,920	
36		22° 3,730	43° 3,800	53° 3,620	60° 3,440	
40			35° 3,320	48° 3,200	56° 3,040	
44			26° 2,820	43° 2,830	52° 2,700	
48			10° 2,060	36° 2,490	47° 2,400	
52				29° 2,150	42° 2,140	
56				19° 1,730	37° 1,890	
60						31° 1,640
64						23° 1,360
68						9° 900

The Gray Area represents a "no work" zone, do not place the basket in this area.

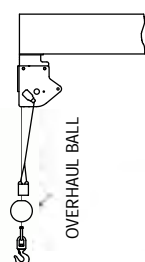
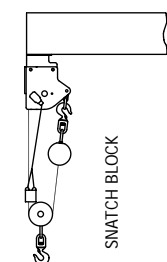
Meets ANSI B30.5 Requirements - Do not operate crane or accessories within 10' (3,05 m) of live power lines.
 NOTICE: This chart is for reference only and must not be used for lifting purposes. Consult factory for other boom options.



DEDUCTIONS

Overhaul Weight	80 lb
Snatch Block	40 lb
2-Manbasket SLR Platform	700 lb

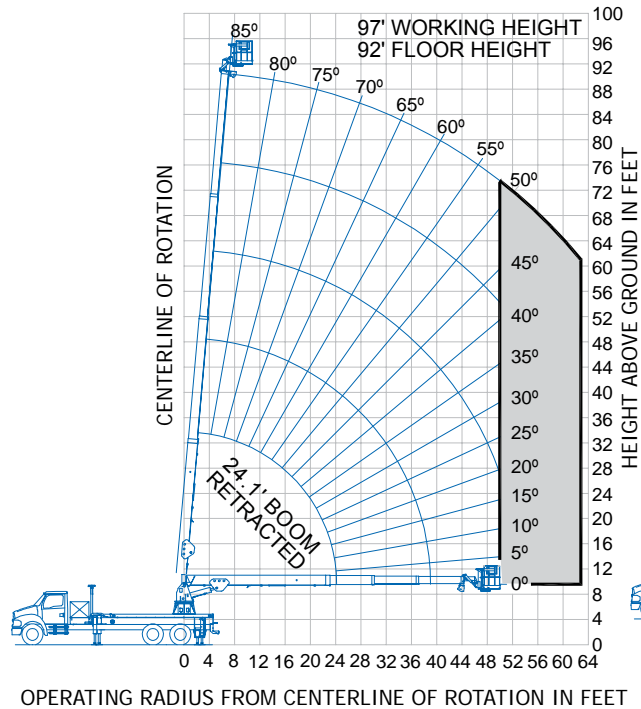
WEIGHTS

1 Part Line	2 Part Line	WARNING
		<p>Anti-two-block system, if supplied, must be in good operating condition before operating crane.</p> <p>Refer to the owner's manual.</p> <p>Keep at least three wraps of load line on the drum at all times.</p>
4,000 lb	6,000 lb	
		1/2" 6 x 25 IWRC (3.5:1 SF) 14,000 lb min. breaking strength

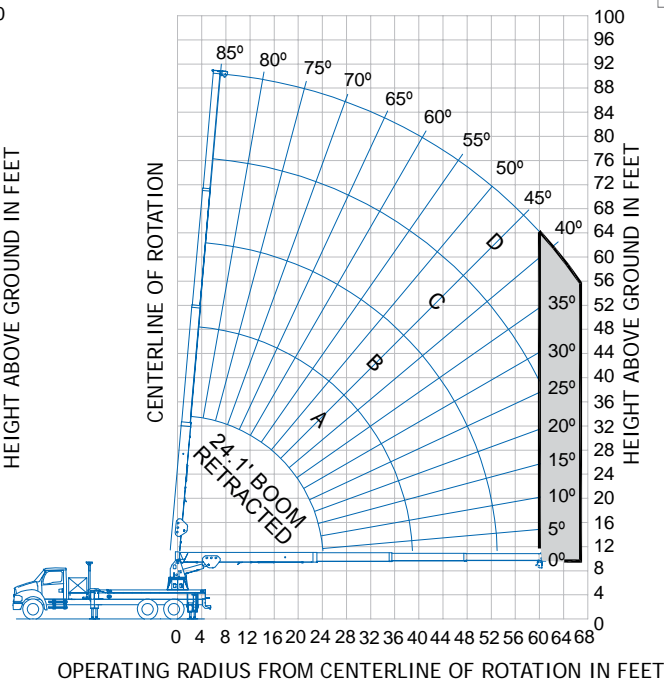
LOAD CHART FOR CRANE APPLICATIONS ONLY

MAIN BOOM LOAD RATINGS IN LBS. WITH OUTRIGGERS FULLY EXTENDED

Operating Radius Feet	24.1 Feet		39 Feet		53 Feet		67 Feet		81.1 Feet	
	∠	lb.	∠	lb.	∠	lb.	∠	lb.	∠	lb.
8	73°	6,000	80°	6,000	83°	5,500				
10	68°	6,000	77°	6,000	81°	5,270	83°	4,000		
12	63°	6,000	74°	5,520	78°	5,050	81°	4,000	84°	3,200
14	57°	5,690	71°	5,250	76°	4,820	80°	3,960	82°	3,100
16	51°	5,380	68°	4,990	74°	4,600	78°	3,800	81°	3,010
18	44°	5,070	64°	4,720	72°	4,370	76°	3,640	79°	2,910
20	37°	4,760	61°	4,450	69°	4,150	74°	3,480	77°	2,820
24	9°	4,150	54°	3,920	64°	3,700	71°	3,160	75°	2,630
28			46°	3,230	60°	3,250	67°	2,840	72°	2,440
32			37°	2,800	54°	2,800	63°	2,520	69°	2,250
36			24°	2,200	49°	2,350	59°	2,200	66°	2,060
40					42°	1,900	55°	1,880	63°	1,870
44					35°	1,500	51°	1,590	59°	1,680
48					27°	1,160	46°	1,250	56°	1,350
52					13°	870	41°	970	52°	1,070
56							35°	750	48°	820
60							28°	530	44°	600



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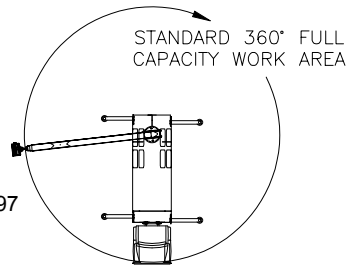


The Gray Area represents a "no work" zone, do not place the boom or load in this area.

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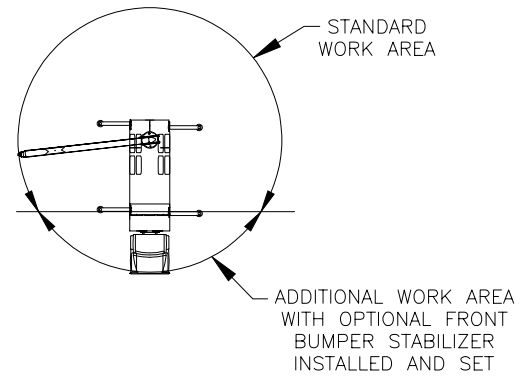
AREA OF OPERATION

Models:
SC62, SC65, SC75, SC97



AREA OF OPERATION

Model: SC85



CHASSIS DATA	SC62	SC65	SC75	SC85	SC97
Chassis RBM (per rail)	1,600,000 in-lbs	1,600,000 in-lbs	1,600,000 in-lbs	1,600,000 in-lbs	1,600,000 in-lbs
Front Axle Gross Weight Rating	12,000 lbs	12,000 lbs	12,000 lbs	16,000 lbs	16,000 lbs
Rear Axle Gross Weight Rating	21,000 lbs	21,000 lbs	21,000 lbs	34,000 lbs	34,000 lbs
Minimum Truck Axle Weight - Front*	6500	6500	6650	7000	7000
Minimum Truck Axle Weight - Rear*	4100	4100	4100	6500	6500
Cab-to-Axle Distance (typ)	138"	150"	187"	187"	187"
Cab-to-End-of-Frame Distance (typ)	245"	245"	276"	276"	276"
Wheelbase (typ)	205"	217"	254"	254"	254"

*Minimum chassis weight is required to meet 85% stability requirements.
Chassis data is general - not for engineering. Some dimensions change depending on truck selection and machine options ordered.

OPTIONAL EQUIPMENT

Work Platform – Gravity Levelled

30" X 46" work platform with 42" high rails and safety lanyard anchor points. Each platform is equipped with a full body harness and lanyard. Basket is secured and cushioned by manual friction brakes and shock absorbers. Platform capacity is 300 lbs.

SLR Work Platform – Self Leveling

30" X 54" work platform with 42" high rails and safety lanyard anchor points. Each platform is equipped with a full body harness and lanyard. The self leveling system consists of one master cylinder mounted to the boom base that interfaces with the two slave cylinders at the platform mounting bracket that together form a hydraulic close-loop system. Platform capacity is 600 lbs.

Jib with hydraulic Winch in basket.

Winch capacity is 400 lbs.

Low oil level shutdown

Two part snatch block

Welder/Generator (200 amps, 5 KW)

Portable remote control module

Special paint colors (customer specified)

OPTIONAL EQUIPMENT

Special Body Rigging

- Front bulkhead at boom rest
- Over cab walkway/bulkhead
- Built in long Lamp Tray (in sub-frame)
- Wood or Steel Beds; 18', 20'
- Full body skirting; steel or aluminum
- Rear step and bumper; steel or aluminum

Lamp/Tool Boxes

- Steel or Aluminum – Tool 1-1/2', 2', 3', 4', 5'
- Steel or Aluminum – Lamp 30"H x 36"W x 100" Lg. 20"H x 20"W x 120" Lg.

Remote Services in Basket And/Or Truck Body

- 110 VAC with GFI
- Weld Leads
- Compressed Air (from chassis)
- Water
- Pressure Washer
- Hydraulic Tool Circuit (6 GPM at basket)
- Oxygen/Acetylene Service



UPTime is the Manitex commitment to complete support of thousands of units working every day.

UPTime

- Includes 24-7-365 parts shipments.
- Utilizes the efficiency of UPNET online parts order system.
- Relies on Manitex's UPTrak support tracking system for performance analysis and resource allocation.
- Features REMan, Manitex's cost effective rebuild/exchange program.
- Provides expert service technicians for troubleshooting and site visits.
- Mandates training; at our facility and yours. It includes coordinated support from all component suppliers.
- Involves every Manitex team member in the support of every Manitex customer.

What does UPTime mean to Manitex customers?

UPTime means reliability.

UPTime means utilization.

UPTime means profitability.



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