

# Lifting Capacities

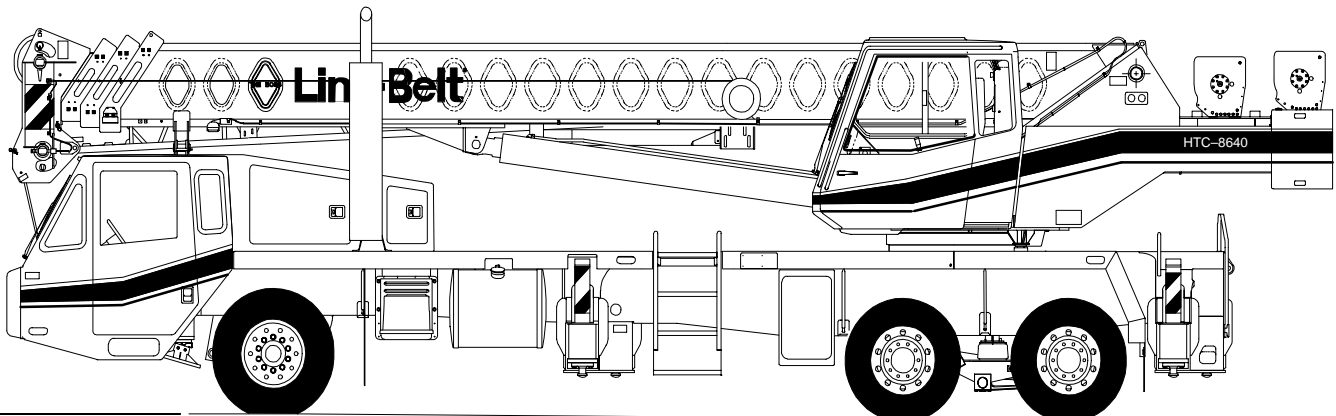
Telescopic Hydraulic Truck Crane

## HTC-8640      40-ton (36.3 metric ton)

Boom and fly capacities for this machine are listed by the following sections:

### Fully Extended Outriggers

- Working Range Diagrams (4,700 lbs. and 6,700 lbs. Counterweight)
- 33 to 57 ft. main boom capacities, A-max mode
- 33 to 105 ft. main boom capacities, Basic Mode "B"
- 28.5 ft. offset fly capacities, Basic Mode "B"
- 28.5 to 51 ft. two-piece offset fly 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.

## BOOM EXTENSION

Boom Mode "A"	Boom Length (ft.)
Only inner mid section telescopes	33
	40
	50
	57
Inner Mid Section 288" Stroke	Base Section

Boom Mode "B"	Boom Length (ft.)		
Inner mid, outer mid and tip sections telescope simultaneously.	33		
	40		
	50		
	60		
	70		
	80		
	90		
	100		
	105		
Tip Section 288" Stroke	Outer Mid Section 288" Stroke	Inner Mid Section 288" Stroke	Base Section

## TIRE INFLATION

Tire Size	Operation	Tire Pressure (psi)
11 R 22.5	Creep	120
275/80 R 22.5	Creep	120

## PONTOON LOADINGS

Maximum Pontoon Load:	Maximum Pontoon Ground Bearing Pressure:
61,750 lbs.	137 psi

## CAPACITY DEDUCTIONS FOR AUXILIARY LOAD HANDLING EQUIPMENT

Load Handling Equipment:	(lbs.)
Auxiliary Head Attached	100
25-ton quick reeve 3 sheave hook block (see hook block for actual weight)	670
40-ton quick reeve 4 sheave hook block (see hook block for actual weight)	780
8.5-ton hook ball (see hook ball for actual weight)	360
Lifting From Main Boom With:	(lbs.)
28.5 ft. or 51 ft. fly stowed on base (see operation note 4)	0
28.5 ft. offset fly erected but not used	2600
51 ft. offset fly erected but not used	4800
Lifting From 28.5 ft. Offset Fly With:	
22.5 ft. fly tip erected but not used	<b>PROHIBITED</b>
22.5 ft. fly tip stowed on 28.5 ft. offset fly	<b>PROHIBITED</b>
Note: Capacity deductions are for Link-Belt supplied equipment only.	

## WINCH PERFORMANCE

Wire Rope Layer	Winch Line Pulls		Drum Rope Capacity (ft.)	
	Two Speed Winch		Layer	Total
	Low Speed Available Lbs.*	High Speed Available Lbs.		
1	13,010	6,418	77	77
2	11,768	5,805	85	162
3	10,742	5,299	93	255
4	9,881	4,874	101	356
5	9,148	4,513	109	465

\*Maximum lifting capacity: Type RB Rope=9,080, Type ZB Rope=11,080

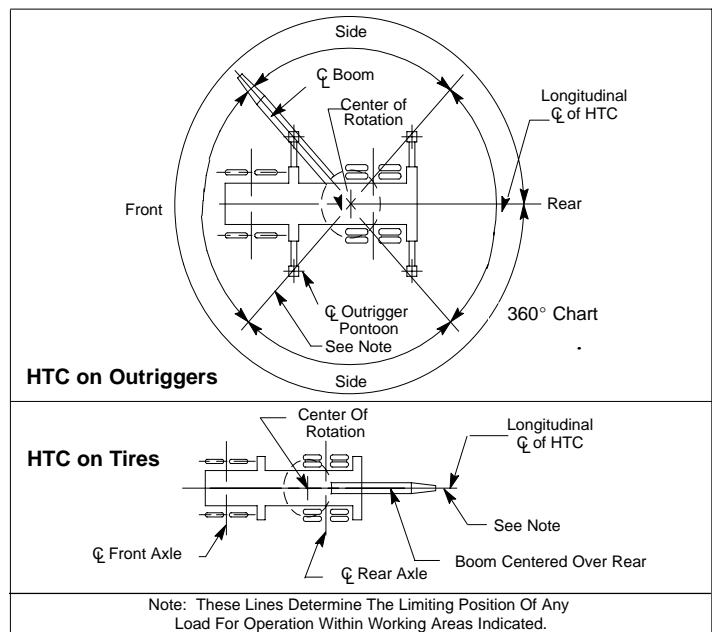
## WIRE ROPE CAPACITY

Maximum Lifting Capacities Based On Wire Rope Strength			
Parts of Line	5/8"	5/8"	Notes
	Type RB	Type ZB	
1	9,080	11,080	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 applications.
2	18,160	22,160	
3	27,240	33,240	
4	36,320	44,320	
5	45,400	55,400	
6	54,480	66,480	
7	63,560	77,560	
8	72,640	88,640	
9	81,720	—	
LBCE	DESCRIPTION		
TYPE RB	18 X 19 Rotation Resistant – Compact Strand, High Strength Preformed, Right Regular Lay		
TYPE ZB	36 X 7 Rotation Resistant – Extra Improved Plow Steel – Right Regular Lay		

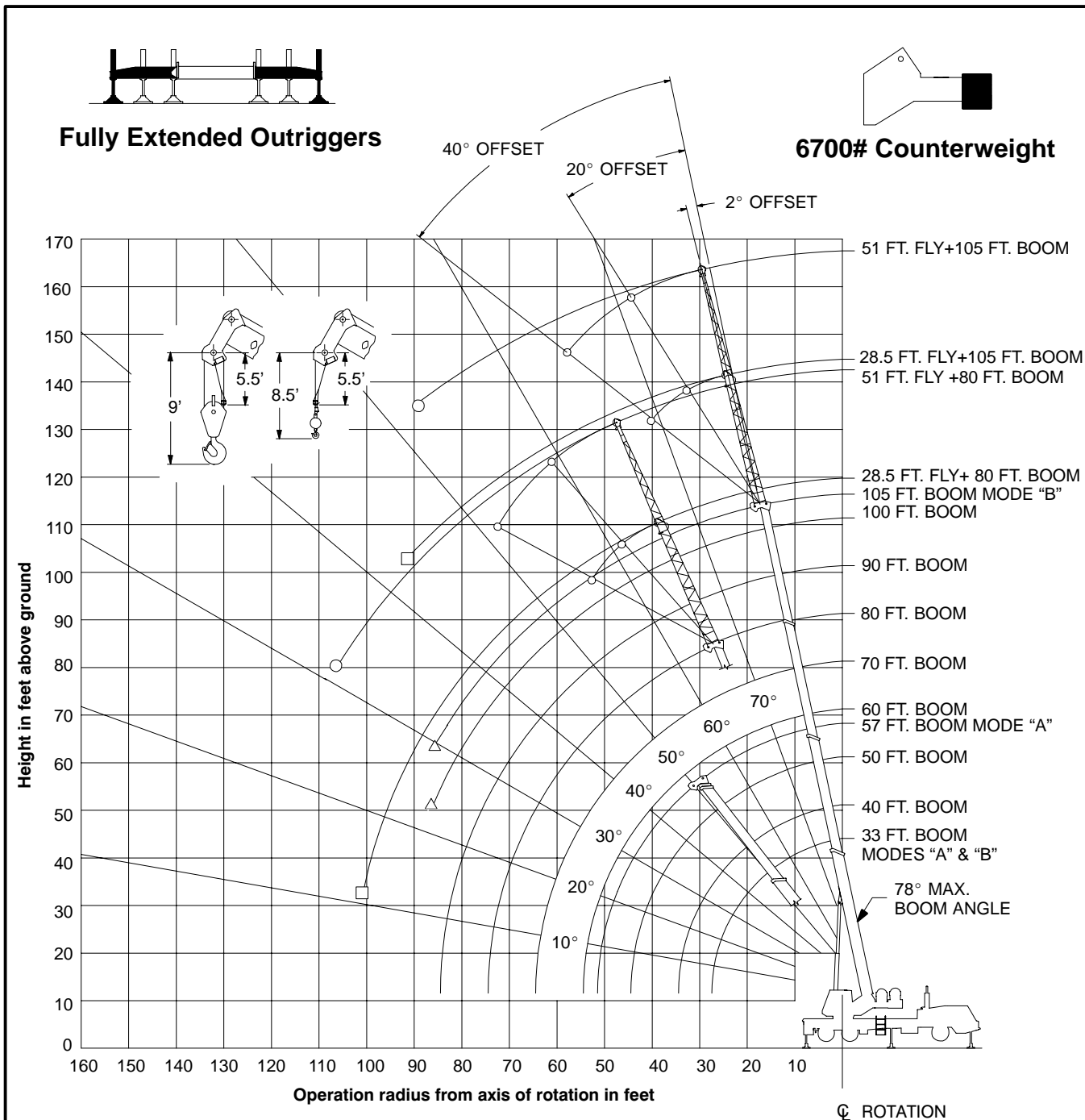
## HYDRAULIC CIRCUIT PRESSURE SETTINGS

Function	Pressure (PSI)
Front And Rear Winch	3100
Outriggers	3000
Boom Hoist	3350
Telescope	3000
Swing	1500
Steering	2000
Bumper Outrigger	650
Pilot Control	500

## WORKING AREAS



# WORKING RANGE DIAGRAM




- Denotes Main Boom + 51' Offset Fly-Boom Mode "B"
- Denotes Main Boom + 28.5' Offset Fly-Boom Mode "B"
- △ Denotes Main Boom - 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.**

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



6,700 lbs.


FULL EXTENSION

MAIN BOOM "A"

Load Radius (Ft.)	33 Ft.			40 Ft.			Load Radius (Ft.)
	∠ °	360°	Over Rear	∠ °	360°	Over Rear	
9	68.0	80,000	80,000				9
10	66.0	72,300	72,300	70.5	72,300	72,300	10
12	62.0	65,800	65,800	67.5	65,500	65,500	12
15	55.5	55,800	55,800	62.5	55,600	55,600	15
20	43.5	40,700	40,800	54.0	40,200	40,200	20
25	26.5	27,200	27,200	44.0	27,000	27,000	25
30				31.0	19,400	19,400	30
Min.Bm Ang./Cap	0 (27.5)	18,400	18,400	0 (34.5)	14,100	14,100	Min.Bm Ang./Cap
Load Radius (Ft.)	50 Ft.			57 Ft.			Load Radius (Ft.)
	∠ °	360°	Over Rear	∠ °	360°	Over Rear	
10	75.0	67,500	67,500	77.0	43,800	43,800	10
12	73.0	61,200	61,200	75.0	43,800	43,800	12
15	69.0	53,400	53,400	72.0	42,100	42,100	15
20	62.5	39,600	39,600	66.5	34,300	34,300	20
25	55.5	26,600	26,600	60.5	26,300	26,300	25
30	48.0	19,100	19,100	54.5	18,900	18,900	30
35	39.0	14,300	14,300	47.5	14,200	14,200	35
40	27.5	10,900	10,900	40.0	10,800	10,800	40
45				30.5	8,200	8,300	45
50				16.0	6,100	6,400	50
Min.Bm Ang./Cap	0 (44.5)	8,400	8,600	0 (51.5)	5,500	5,900	Min.Bm Ang./Cap

Note: Refer To Page 5 For "Capacity Deductions For Auxiliary Load Handling Equipment".  
∠ Loaded Boom Angle In Degrees.  
( ) Reference Radius For Min. Boom Angle Capacities (Shown in Parenthesis) Are In Feet.

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



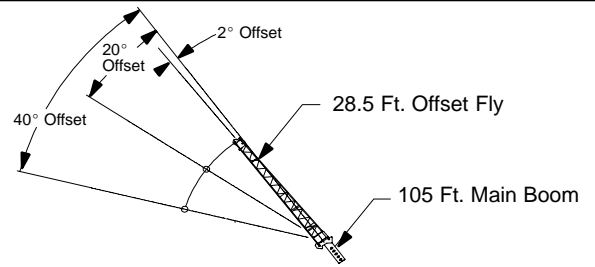
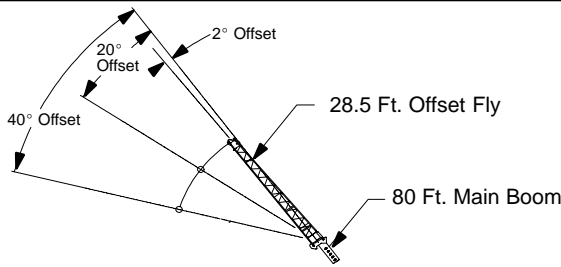
6,700 lbs.

FULL EXTENSION

MAIN BOOM "B"

Load Radius (Ft.)	33 Ft.			40 Ft.			50 Ft.			Load Radius (Ft.)
	∠ °	360°	Over Rear	∠ °	360°	Over Rear	∠ °	360°	Over Rear	
9	68.0	80,000	80,000							9
10	66.0	72,300	72,300	70.5	35,000	35,000	74.5	35,000	35,000	10
12	62.0	65,800	65,800	67.5	35,000	35,000	72.5	35,000	35,000	12
15	55.5	55,800	55,800	62.5	35,000	35,000	68.5	35,000	35,000	15
20	43.5	40,700	40,800	54.0	35,000	35,000	62.5	35,000	35,000	20
25	26.5	27,200	27,200	43.5	27,900	27,900	55.5	28,400	28,400	25
30				31.0	20,300	20,300	47.5	20,900	20,900	30
35							39.0	15,900	15,900	35
40							27.5	12,500	12,500	40
Min.Bm Ang./Cap	0 (27.5)	18,400	18,400	0 (34.5)	13,500	13,500	0 (44.5)	9,200	9,200	Min.Bm Ang./Cap
Load Radius (Ft.)	60 Ft.			70 Ft.			80 Ft.			Load Radius (Ft.)
	∠ °	360°	Over Rear	∠ °	360°	Over Rear	∠ °	360°	Over Rear	
10	77.5	35,000	35,000							10
12	75.5	35,000	35,000							12
15	72.5	35,000	35,000	75.5	35,000	35,000				15
20	67.5	35,000	35,000	71.5	35,000	35,000	74.5	30,700	30,700	20
25	62.0	28,600	28,600	67.0	28,700	28,700	71.0	26,400	26,400	25
30	56.5	21,100	21,100	62.5	21,200	21,200	67.0	21,300	21,300	30
35	50.0	16,300	16,300	57.5	16,400	16,400	62.5	16,500	16,500	35
40	43.5	12,800	12,800	52.0	13,000	13,000	58.0	13,100	13,100	40
45	35.5	10,300	10,300	46.5	10,400	10,500	53.5	10,500	10,600	45
50	25.0	8,200	8,400	40.0	8,400	8,600	48.5	8,500	8,800	50
55				32.5	6,800	7,000	43.5	6,900	7,200	55
60				23.0	5,500	5,800	37.5	5,700	6,000	60
65							30.5	4,600	4,900	65
70							22.0	3,700	4,000	70
Min.Bm Ang./Cap	0 (54.5)	6,500	6,500	0 (64.5)	4,500	4,600	0 (74.5)	3,000	3,300	Min.Bm Ang./Cap
Load Radius (Ft.)	90 Ft.			100 Ft.			105 Ft.			Load Radius (Ft.)
	∠ °	360°	Over Rear	∠ °	360°	Over Rear	∠ °	360°	Over Rear	
20	77.0	27,400	27,400							20
25	73.5	23,500	23,500	76.0	21,000	21,000	76.5	17,500	17,500	25
30	70.0	20,500	20,500	73.0	18,700	18,700	74.0	17,500	17,500	30
35	66.5	16,600	16,600	70.0	16,500	16,500	71.0	15,700	15,700	35
40	62.5	13,200	13,200	66.5	13,200	13,200	68.0	13,300	13,300	40
45	59.0	10,600	10,700	63.0	10,600	10,700	64.5	10,700	10,800	45
50	55.0	8,600	8,800	59.5	8,700	8,900	61.5	8,700	8,900	50
55	50.5	7,000	7,300	56.0	7,100	7,400	58.0	7,100	7,400	55
60	46.0	5,700	6,100	52.0	5,800	6,100	54.5	5,800	6,200	60
65	41.0	4,700	5,000	48.0	4,800	5,100	51.0	4,800	5,200	65
70	35.5	3,800	4,200	44.0	3,900	4,200	47.0	3,900	4,300	70
75	29.0	3,100	3,400	39.0	3,200	3,500	43.0	3,200	3,500	75
80	20.5	2,400	2,800	34.0	2,500	2,900	38.5	2,500	2,900	80
85				28.0	2,000	2,300	33.0	2,000	2,300	85
Min.Bm Ang./Cap	0 (84.5)	1,900	2,200	23.5 (87.7)			29.5 (88.2)			Min.Bm Ang./Cap

Note: Refer To Page 5 For "Capacity Deductions For Auxiliary Load Handling Equipment".  
∠ Loaded Boom Angle In Degrees.  
( ) Reference Radius For Min. Boom Angle Capacities (Shown In Parenthesis) Are In Feet.



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

Load Radius (Ft.)	2° Offset		20° Offset		40° Offset		Load Radius (Ft.)
	∠	360°	∠	360°	∠	360°	
	25	77.0	15,200				
30	74.5	13,900					30
35	72.0	11,900	76.0	8,700			35
40	69.0	11,000	73.0	8,100	77.0	6,100	40
45	66.0	10,300	70.0	7,600	74.0	5,800	45
50	63.0	9,600	67.0	7,100	71.0	5,600	50
55	60.0	8,100	64.0	6,700	67.5	5,400	55
60	56.5	6,800	61.0	6,400	64.0	5,300	60
65	53.0	5,700	57.5	6,000	60.5	5,100	65
70	49.5	4,800	53.5	5,200	57.0	5,000	70
75	45.5	4,000	49.5	4,400	52.5	4,700	75
80	41.0	3,400	45.5	3,700	48.0	3,900	80
85	36.5	2,800	40.5	3,000	42.5	3,200	85
90	31.5	2,300	35.0	2,500			90
95	25.0	1,900	28.5	2,000			95
100	16.5	1,500	18.0	1,500			100

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

Load Radius (Ft.)	2° Offset		20° Offset		40° Offset		Load Radius (Ft.)
	∠	360°	∠	360°	∠	360°	
	35	76.5	9,000				
40	74.5	9,000	78.0°	7,900			40
45	72.5	8,800	76.0	7,500			45
50	70.0	7,900	73.5	7,200	76.5	5,700	50
55	67.5	7,200	71.0	6,600	74.0	5,500	55
60	65.5	6,500	69.0	6,100	71.5	5,400	60
65	62.5	5,400	66.5	5,700	69.5	5,200	65
70	60.0	4,500	63.5	5,100	66.5	5,000	70
75	57.0	3,800	61.0	4,200	64.0	4,600	75
80	54.0	3,100	58.0	3,500	60.5	3,900	80
85	51.0	2,500	54.5	2,900	57.5	3,200	85
90	48.0	2,000	51.5	2,400	54.0	2,600	90
95	44.5	1,600	48.0	1,900	50.5	2,100	95
100			44.5	1,500	46.5	1,600	100

**WARNING**

Do Not Lower 28.5 Ft. Offset Fly In Working Position Below 43.5° Main Boom Angle Unless Main Boom Length Is 79 Ft. Or Less, Since Loss Of Stability Will Occur Causing A Tipping Condition.

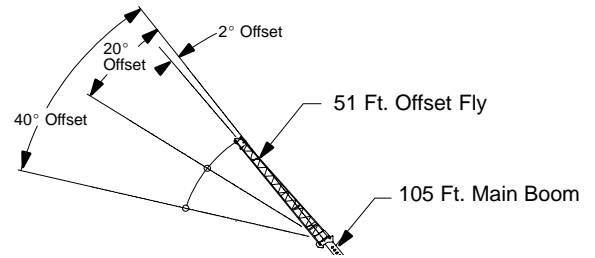
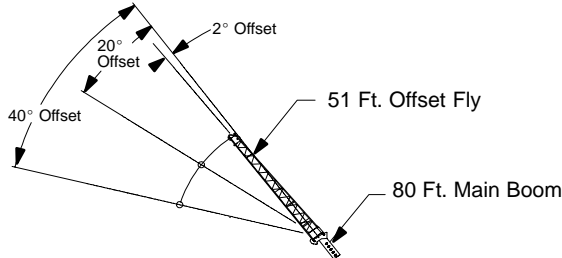
**WARNING**  
Do Not Lower 28.5 Ft. Offset Fly In Working Position Below 11.5° Main Boom Angle Unless Main Boom Length Is 79 Ft. Or Less, Since Loss Of Stability Will Occur Causing A Tipping Condition.

Note: Refer To Page 6 For "Capacity Deductions For Auxiliary Load Handling Equipment".

∠ Loaded Boom Angle In Degrees. \* This Capacity Based On Maximum Obtainable Boom Angle.

Note: Refer To Page 6 For "Capacity Deductions For Auxiliary Load Handling Equipment".

∠ Loaded Boom Angle In Degrees. \* This Capacity Based On Maximum Obtainable Boom Angle.



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

Load Radius (Ft.)	2° Offset		20° Offset		40° Offset		Load Radius (Ft.)
	∠	360°	∠	360°	∠	360°	
	35	76.0	7,400				
40	74.0	6,700					40
45	71.5	6,100	78.0°	4,200			45
50	69.5	5,600	76.0	3,900			50
55	67.0	5,100	73.5	3,700			55
60	64.5	4,700	71.0	3,500	77.0	2,700	60
65	62.0	4,300	68.5	3,300	74.5	2,600	65
70	59.5	4,000	66.0	3,100	72.0	2,500	70
75	57.0	3,800	63.0	2,900	69.0	2,400	75
80	54.0	3,500	60.5	2,800	66.0	2,300	80
85	51.0	3,300	57.5	2,700	62.5	2,300	85
90	48.0	2,900	54.5	2,600	59.5	2,200	90
95	44.5	2,400	51.0	2,500	55.5	2,200	95
100	41.0	2,000	47.5	2,400	51.5	2,200	100
105	37.0	1,700	43.5	2,000	47.0	2,100	105
110	33.0	1,400	39.0	1,600	41.5	1,800	110
115			33.5	1,300			115

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

Load Radius (Ft.)	2° Offset		20° Offset		40° Offset		Load Radius (Ft.)
	∠	360°	∠	360°	∠	360°	
	40	77.5	5,800				
45	75.5	5,700					45
50	74.0	5,400					50
55	72.0	5,100	77.5	3,700			55
60	70.5	4,800	75.5	3,500			60
65	68.5	4,500	73.5	3,400			65
70	66.5	4,200	71.5	3,200	76.5	2,500	70
75	64.5	3,900	69.5	3,100	74.5	2,400	75
80	62.0	3,600	67.5	2,900	72.5	2,400	80
85	60.0	3,000	65.5	2,800	70.5	2,300	85
90	57.5	2,500	63.5	2,700	68.0	2,300	90
95	55.0	2,100	61.0	2,600	65.5	2,200	95
100			58.5	2,200	63.0	2,200	100
105			55.5	1,800	60.5	2,200	105
110					57.5	1,700	110
115					54.0	1,400	115

**WARNING**

Do Not Lower 51 Ft. Offset Fly In Working Position Below 52.5° Main Boom Angle Unless Main Boom Length Is 71 Ft. Or Less, Since Loss Of Stability Will Occur Causing A Tipping Condition.

**WARNING**  
Do Not Lower 51 Ft. Offset Fly In Working Position Below 31.5° Main Boom Angle Unless Main Boom Length Is 71 Ft. Or Less, Since Loss Of Stability Will Occur Causing A Tipping Condition.

Note: Refer To Page 6 For "Capacity Deductions For Auxiliary Load Handling Equipment".

∠ Loaded Boom Angle In Degrees. \* This Capacity Based On Maximum Obtainable Boom Angle.

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