

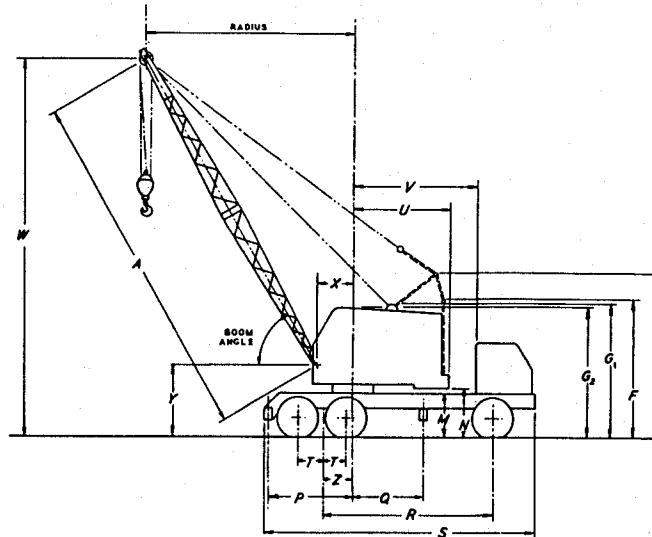
**LINK-BELT  
SPEEDER**

# HC-78A 30-Ton Zephyrcrane

## Clearances - Working Ranges - Lifting Capacities

CCC 3-AXLE CARRIER OR FWD 3-AXLE CARRIER  
(Supersedes CRF3045-3-59)

**GENERAL INFORMATION ONLY**



GENERAL DIMENSIONS		CCC CARRIER	FWD CARRIER
Basic boom length	A	35'	35'
Over-all height retractable high gantry lowered	F	12' 3"	12' 2"
Over-all height retractable high gantry raised	G	15' 7"	15' 6"
Over-all height low gantry <sup>①</sup>	G1	12' 1"	12' 0"
Cab clearance height	G2	11' 9"	11' 8"
Over-all cab width		7' 10"	7' 10"
Over-all height top of ring gear plate	M	4' 3"	4' 2"
Ground clearance under counterweight	N	4' 11"	4' 10"
Centerline rotation to rear outrigger center	P	7' 9"	7' 8"
Centerline rotation to front outrigger center	Q	7' 9"	6' 11"
Truck wheelbase	R	17' 1"	17' 1"
Over-all length over rear outrigger box	S	26' 6"	26' 8"
Center of wheel to bogie pivot	T	2' 3"	2' 3"
Tailswing of counterweight	U	10' 5"	10' 5"
Centerline rotation to back of truck cab	V	13' 1"	12' 11"
Radius of boom hinge pin	X	3' 1"	3' 1"
Height of boom hinge pin	Y	6' 7"	6' 6"
Centerline rotation to rear axle bogie pivot	Z	2' 6"	2' 6"
Maximum over-all width—(over tires)		8' 0"	8' 0"
Maximum over-all width—(over outrigger box)		8' 0"	8' 0"
Maximum over-all width—(outriggers extended)		15' 6"	15' 6"
Turning radius (centerline front outside tire)		39' 8"	39' 0"

① Low gantry available for use with shovel, hoe, or crane boom lengths not exceeding 50'. Consult factory if lifting capacities required.

### CARRIER BRIEF SPECIFICATIONS

Heavy duty all welded frame: 11:00 x 20, 12-ply tires—dual tires on rear tandem axles; single tires on front axle; 4-wheel air brakes on rear wheels only are standard with 6-wheel air brakes optional extra. Hydraulic power steering; 6 x 4-drive. Standard engine—International RD501 gasoline, 212 brake h.p. @ 3000 r.p.m. governed speed. 10 speeds forward, 2 reverse.

**WE ARE CONSTANTLY IMPROVING OUR PRODUCTS AND THEREFORE RESERVE  
THE RIGHT TO CHANGE DESIGNS AND SPECIFICATIONS**

For Certified Dimensions, Consult Factory

**LINK-BELT SPEEDER CORPORATION — CEDAR RAPIDS, IOWA**

NR 1-2-7 1-28-60

# HC-78A LIFTING CAPACITIES<sup>①</sup> WITH STANDARD RETRACTABLE HIGH GANTRY

## 3-AXLE CARRIER (8' AXLE) - STANDARD 34" DEEP BOOM -

FOR DRAGLINE, CLAMSHELL AND MAGNET CAPACITIES SEE NOTE <sup>②</sup>

BOOM			W. Boom Point Height	WITH OUTRIGGERS		WITHOUT OUTRIGGERS	
Length	Radius	Angle		Side or Rear	Side	Rear	
35'	10'	79°	40' 11"	60,000*	28,220*	40,720	
	12'	75°	40' 5"	60,000*	22,970	31,830	
	15'	70°	39' 6"	50,000*	17,080	23,830	
	20'	61°	37' 2"	37,780	11,760	16,590	
	25'	51°	33' 11"	26,550	8,810	12,570	
	30'	40°	29' 0"	20,320	6,930	10,010	
	35'	24°	20' 11"	16,350	5,630	8,230	
40'	10'	80°	46' 0"	59,800*	27,960*	40,560	
	12'	77°	45' 7"	59,800*	22,810	31,670	
	15'	73°	44' 9"	49,800*	16,920	23,670	
	20'	65°	42' 9"	37,680	11,610	16,430	
	25'	57°	40' 0"	26,440	8,660	12,410	
	30'	48°	36' 2"	20,200	6,780	9,850	
	35'	37°	30' 8"	16,220	5,480	8,080	
	40'	23°	22' 0"	13,470	4,530	6,780	
50'	12'	80°	55' 8"	59,600*	22,490	31,360	
	15'	76°	55' 2"	49,600*	16,610	23,360	
	20'	70°	53' 7"	37,490	11,300	16,130	
	25'	64°	51' 6"	26,220	8,350	12,110	
	30'	58°	48' 8"	19,960	6,480	9,550	
	35'	51°	45' 1"	15,970	5,180	7,780	
	40'	43°	40' 3"	13,210	4,230	6,480	
	45'	33°	33' 11"	11,190	3,500	5,490	
	50'	21°	23' 10"	9,640	2,920	4,700	
60'	15'	79°	65' 5"	49,400*	16,300	23,050	
	20'	74°	64' 1"	37,300	10,990	15,820	
	25'	69°	62' 5"	26,000	8,050	11,800	
	30'	64°	60' 2"	19,720	6,170	9,250	
	35'	58°	57' 5"	15,720	4,870	7,480	
	40'	52°	53' 11"	12,960	3,920	6,180	
	45'	46°	49' 7"	10,930	3,200	5,190	
	50'	39°	44' 0"	9,380	2,620	4,400	
	55'	30°	36' 9"	8,150	2,160	3,770	
	60'	19°	25' 9"	7,160	1,770	3,240	
70'	15'	80°	75' 7"	49,200*	15,990	22,740	
	20'	76°	74' 6"	37,110	10,690	15,510	
	25'	72°	73' 0"	25,780	7,740	11,500	
	30'	68°	71' 2"	19,480	5,870	8,940	
	35'	63°	68' 9"	15,470	4,570	7,170	
	40'	58°	66' 1"	12,700	3,620	5,880	
	45'	53°	62' 7"	10,670	2,890	4,880	
	50'	48°	58' 7"	9,110	2,320	4,100	
	55'	42°	53' 7"	7,880	1,860	3,470	
	60'	36°	47' 3"	6,890	1,470	2,940	
	70'	17°	27' 2"	5,380	880	2,130	

BOOM			W. Boom Point Height	WITH OUTRIGGERS		WITHOUT OUTRIGGERS	
Length	Radius	Angle		Side or Rear	Side	Rear	
80'	20'	78°	84' 9"	36,910	10,380	15,200	
	25'	74°	83' 7"	25,550	7,440	11,190	
	30'	70°	82' 0"	19,240	5,560	8,640	
	35'	67°	80' 0"	15,220	4,270	6,870	
	40'	63°	77' 7"	12,440	3,320	5,570	
	45'	59°	74' 8"	10,400	2,590	4,580	
	50'	54°	71' 6"	8,840	2,020	3,800	
	55'	50°	67' 7"	7,610	1,560	3,170	
	60'	45°	62' 11"	6,620	1,170	2,640	
	80'	16°	50' 6"	5,100	580	1,830	
			4,000	130	1,220		
90'	20'	79°	95' 0"	36,720	10,070	14,900	
	25'	76°	93' 10"	25,330	7,130	10,890	
	30'	73°	92' 6"	19,000	5,260	8,330	
	35'	69°	90' 9"	14,970	3,970	6,570	
	40'	66°	88' 8"	12,190	3,020	5,270	
	45'	62°	86' 2"	10,140	2,290	4,280	
	50'	59°	83' 5"	8,580	1,720	3,500	
	55'	55°	80' 1"	7,340	1,250	2,870	
	60'	51°	76' 4"	6,340	870	2,340	
	70'	42°	66' 9"	4,820	280	1,530	
80'	31°	53' 4"	3,720	----	930		
90'	15°	29' 11"	2,890	----	460		
100'	20'	80°	105' 3"	36,530	9,770	14,590	
	25'	77°	104' 1"	25,110	6,830	10,580	
	30'	74°	102' 11"	18,760	4,960	8,030	
	35'	71°	101' 4"	14,720	3,660	6,270	
	40'	68°	99' 6"	11,930	2,720	4,970	
	45'	65°	97' 4"	9,880	1,990	3,980	
	50'	62°	94' 11"	8,310	1,420	3,200	
	55'	59°	92' 0"	7,070	950	2,570	
	60'	55°	88' 9"	6,070	570	2,040	
	70'	48°	80' 11"	4,550	----	1,230	
80'	40°	70' 6"	3,440	----	630		
90'	30°	56' 0"	2,610	----	160		
100'	15°	31' 3"	1,950	----	----		

GENERAL INFORMATION ONLY

<sup>①</sup> Lifting capacities shown are in pounds and are not more than 85% of minimum tipping loads with machine standing of firm level ground. A deduction must be made from the above lifting capacities for weights of hook block, hook, sling, grapple, etc.

<sup>②</sup> When figuring bucket or magnet capacities, use lifting capacities shown in the column—"Without outriggers—Side." For normal dragline work on firm level ground, capacities shown should not be exceeded. For clamshell, lifting magnet or similar work where the outward swing of the load in rotation adds to the load imposed on the machine, the capacities should be reduced by at least 20%. Weight of bucket or magnet plus load should not exceed the resulting net capacity at the maximum desired operating radius, or the following, whichever is least—dragline 6,000 clamshell or magnet 7,000#. These are maximum values and allowance must be made for soft or uneven footing, bucket suction and other unfavorable conditions. Boom length for average dragline, clamshell, magnet or similar work should not exceed 50'.

<sup>③</sup> Drag crane service only for all boom lengths over 50'.

\* Indicates these lifting capacities are based upon strength of material. See note <sup>①</sup> regarding all other lifting capacities.

BRIEF SPECIFICATIONS	
LIFTING CRANE, CLAMSHELL, DRAGLINE	
Approximate working weight with 35' boom, retractable high gantry, gasoline engine, but no hook block, tagline or fairleader:	
with C.C.C. Carrier	59,950 lbs.
with F.W.D. Carrier	61,850 lbs.
Lifting Crane Lagging	Line Pull
12" hoist (front)	15,130 lbs. @ 140 f.p.m.
12" hoist (rear)	14,650 lbs. @ 140 f.p.m.
Clamshell Lagging	
14" closing (front)	13,050 lbs. @ 162 f.p.m.
14" holding (rear)	12,650 lbs. @ 162 f.p.m.
Dragline Lagging	
12" inhaul (front)	15,130 lbs. @ 140 f.p.m.
14" hoist (rear)	12,650 lbs. @ 162 f.p.m.
Swing Speed	4 r.p.m.
MAXIMUM BOOM LENGTHS	
Machine Can Handle Without Assistance	34" Deep Boom
Max. boom machine can pick clear of ground over rear and travel <sup>③</sup>	70'
Max. boom plus jib machine can pick off ground over rear and travel <sup>③</sup>	55' + 30' jib
Max. boom machine can pick off ground on outriggers, over rear	100'
over side	100'
Max. boom plus jib machine can pick off ground on outriggers, over rear	100' + 40' jib
over side	100' + 40' jib
<sup>③</sup> Maximum travel speed 5 m.p.h.	

# HC-78A LIFTING CAPACITIES<sup>①</sup> WITH STANDARD RETRACTABLE HIGH GANTRY

## 3-AXLE CARRIER (9' AXLE)

### - STANDARD 34" DEEP BOOM -

FOR DRAGLINE, CLAMSHELL AND MAGNET CAPACITIES SEE NOTE ②

GENERAL INFORMATION ONLY

BOOM			W. Boom Point Height	WITH OUTRIGGERS		WITHOUT OUTRIGGERS	
Length	Radius	Angle		Side or Rear	Side	Rear	Rear
35'	10'	79°	40' 11"	60,000*	29,460*	40,720	
	12'	75°	40' 5"	60,000*	25,060	31,830	
	15'	70°	39' 6"	50,000*	18,530	23,830	
	20'	61°	37' 2"	37,780	12,710	16,590	
	25'	51°	33' 11"	26,550	9,510	12,570	
	30'	40°	29' 0"	20,320	7,480	10,010	
	35'	24°	20' 11"	16,350	6,090	8,230	
40'	10'	80°	46' 0"	59,800*	29,210*	40,560	
	12'	77°	45' 7"	59,800*	24,910	31,670	
	15'	73°	44' 9"	49,800*	18,380	23,670	
	20'	65°	42' 9"	37,680	12,560	16,430	
	25'	57°	40' 0"	26,440	9,360	12,410	
	30'	48°	36' 2"	20,200	7,330	9,850	
	35'	37°	30' 8"	16,220	5,940	8,080	
	40'	23°	22' 0"	13,470	4,920	6,780	
50'	12'	80°	55' 8"	59,600*	24,600	31,360	
	15'	76°	55' 2"	49,600*	18,080	23,360	
	20'	70°	53' 7"	37,490	12,260	16,130	
	25'	64°	51' 6"	26,220	9,060	12,110	
	30'	58°	48' 8"	19,960	7,030	9,550	
	35'	51°	45' 1"	15,970	5,640	7,780	
	40'	43°	40' 3"	13,240	4,620	6,480	
	45'	33°	33' 11"	11,190	3,840	5,490	
	50'	21°	23' 10"	9,640	3,220	4,700	
60'	15'	79°	65' 5"	49,400*	17,770	23,050	
	20'	74°	64' 1"	37,300	11,950	15,820	
	25'	69°	62' 5"	26,000	8,750	11,800	
	30'	64°	60' 2"	19,720	6,730	9,250	
	35'	58°	57' 5"	15,720	5,340	7,480	
	40'	52°	53' 11"	12,960	4,320	6,180	
	45'	46°	49' 7"	10,930	3,540	5,190	
	50'	39°	44' 0"	9,380	2,920	4,400	
	60'	30°	36' 9"	8,150	2,430	3,770	
		19°	25' 9"	7,160	2,020	3,240	
70'	15'	80°	75' 7"	49,200*	17,470	22,740	
	20'	76°	74' 6"	37,110	11,650	15,510	
	25'	72°	73' 0"	25,780	8,450	11,500	
	30'	68°	71' 2"	19,480	6,430	8,940	
	35'	63°	68' 9"	15,470	5,040	7,170	
	40'	58°	66' 1"	12,700	4,020	5,880	
	45'	53°	62' 7"	10,670	3,240	4,880	
	50'	48°	58' 7"	9,110	2,620	4,100	
	55'	42°	53' 7"	7,880	2,130	3,470	
	60'	36°	47' 3"	6,890	1,720	2,940	
70'	17°	27' 2"	5,380	1,080	2,130		

BOOM			W. Boom Point Height	WITH OUTRIGGERS		WITHOUT OUTRIGGERS	
Length	Radius	Angle		Side or Rear	Side	Rear	Rear
80'	20'	78°	84' 9"	36,910	11,350	15,200	
	25'	74°	83' 7"	25,550	8,150	11,190	
	30'	70°	82' 0"	19,240	6,130	8,640	
	35'	67°	80' 0"	15,220	4,740	6,870	
	40'	63°	77' 7"	12,440	3,720	5,570	
	45'	59°	74' 8"	10,400	2,940	4,580	
	50'	54°	71' 6"	8,840	2,320	3,800	
	55'	50°	67' 7"	7,610	1,830	3,170	
	60'	45°	62' 11"	6,620	1,420	2,640	
	70'	33°	50' 6"	5,100	780	1,830	
80'	16°	28' 8"	4,000	310	1,220		
90'	20'	79°	95' 0"	36,720	11,050	14,900	
	25'	76°	93' 10"	25,330	7,850	10,890	
	30'	73°	92' 6"	19,000	5,830	8,330	
	35'	69°	90' 9"	14,970	4,440	6,570	
	40'	66°	88' 8"	12,190	3,420	5,270	
	45'	62°	86' 2"	10,140	2,640	4,280	
	50'	59°	83' 5"	8,580	2,030	3,500	
	55'	55°	80' 1"	7,340	1,530	2,870	
	60'	51°	76' 4"	6,340	1,120	2,340	
	70'	42°	66' 9"	4,820	490	1,530	
80'	31°	53' 4"	3,720	----	930		
90'	15°	29' 11"	2,890	----	460		
100'	20'	80°	105' 3"	36,530	10,740	14,590	
	25'	77°	104' 1"	25,110	7,550	10,580	
	30'	74°	102' 11"	18,760	5,530	8,030	
	35'	71°	101' 4"	14,720	4,140	6,270	
	40'	68°	99' 6"	11,930	3,120	4,970	
	45'	65°	97' 4"	9,880	2,340	3,980	
	50'	62°	94' 11"	8,310	1,730	3,200	
	55'	59°	92' 0"	7,070	1,230	2,570	
	60'	55°	88' 9"	6,070	820	2,040	
	70'	48°	80' 11"	4,550	190	1,230	
80'	40°	70' 6"	3,440	----	630		
90'	30°	56' 0"	2,610	----	160		
100'	15°	31' 3"	1,950	----	----		

① Lifting capacities shown are in pounds and are not more than 85% of minimum tipping loads with machine standing of firm level ground. A deduction must be made from the above lifting capacities for weights of hook block, hook, sling, grapple, etc.

② When figuring bucket or magnet capacities, use lifting capacities shown in the column—"Without outriggers—Side." For normal dragline work on firm level ground, capacities shown should not be exceeded. For clamshell, lifting magnet or similar work where the outward swing of the load in rotation adds to the load imposed on the machine, the capacities should be reduced by at least 20%. Weight of bucket or magnet plus load should not exceed the resulting net capacity at the maximum desired operating radius, or the following, whichever is least—dragline 6,000 ~~5,500~~ clamshell or magnet 7,000#. These are maximum values and allowance must be made for soft or uneven footing, bucket suction and other unfavorable conditions. Boom length for average dragline, clamshell, magnet or similar work should not exceed 50'.

③ Lifting crane service only for all boom lengths over 50'.

\* Indicates these lifting capacities are based upon strength of material. See note ① regarding all other lifting capacities.

### BRIEF SPECIFICATIONS

#### LIFTING CRANE, CLAMSHELL, DRAGLINE

Approximate working weight with 35' boom, retractable high gantry, gasoline engine, but no hook block, tagline or fairleader:

- with C.C.C. Carrier ----- 60,500 lbs.
- with F.W.D. Carrier ----- 62,000 lbs.

Lifting Crane Lagging

Line Pull	Line Speed
12" hoist (front) ----- 15,130 lbs.	@ 140 f.p.m.
12" hoist (rear) ----- 14,650 lbs.	@ 140 f.p.m.

Clamshell Lagging

14" closing (front) ----- 13,050 lbs.	@ 162 f.p.m.
14" holding (rear) ----- 12,650 lbs.	@ 162 f.p.m.

Dragline Lagging

12" inhaul (front) ----- 15,130 lbs.	@ 140 f.p.m.
14" hoist (rear) ----- 12,650 lbs.	@ 162 f.p.m.

Swing Speed ----- 4 r.p.m.

MAXIMUM BOOM LENGTHS Machine Can Handle Without Assistance	34' Deep Boom
Max. boom machine can pick clear of ground over rear and travel <sup>③</sup> -----	70'
Max. boom plus jib machine can pick off ground over rear and travel <sup>③</sup> -----	55' + 30' jib
Max. boom machine can pick off ground on outriggers, over rear -----	100'
over side -----	100'
Max. boom plus jib machine can pick off ground on outriggers, over rear -----	100' + 40' jib
over side -----	100' + 40' jib

④ Maximum travel speed 5 m.p.h.

**LINK-BELT  
SPEEDER**

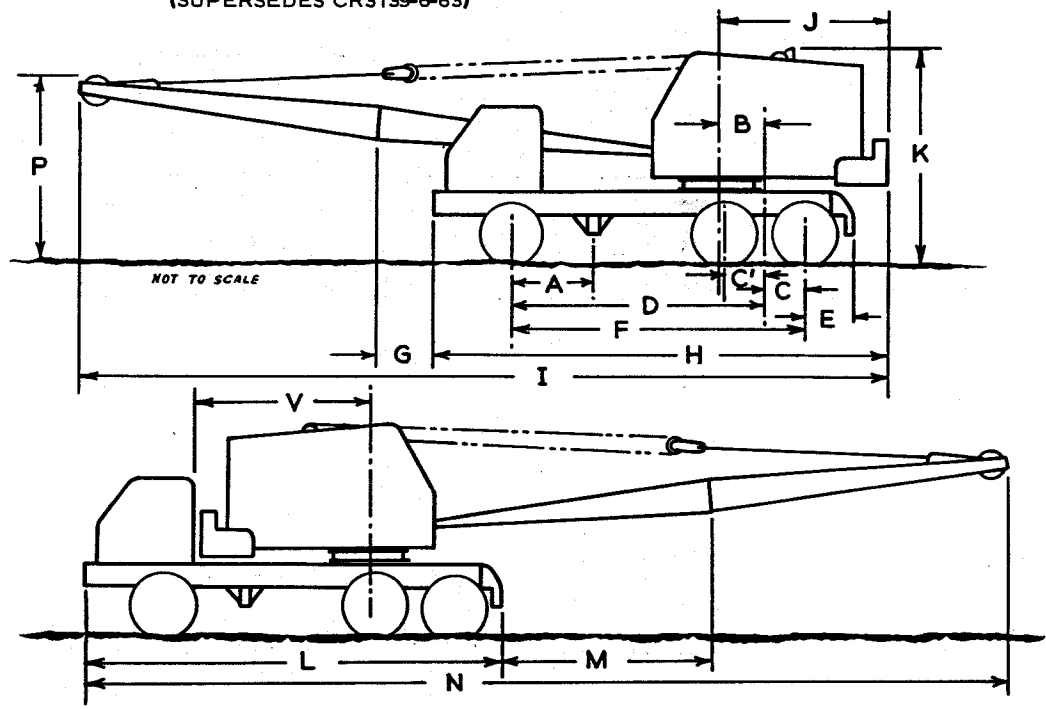
**HC-78A (3-AXLE) CARRIER AXLE LOADING CHART (C.C.C. (9' AXLE))**

(SUPERSEDES CR3139-6-63)

**INDEX TO ILLUSTRATIONS**

**Dimensions:**

- A - 6' 11"
  - B - 2' 6"
  - C - 2' 3"
  - C<sub>L</sub> - 2' 3"
  - D - 17' 1" Wheelbase
  - E - 3' 8"
  - F - 19' 4"
  - G - 4' 10"
  - H - 28' 10"
  - I - 49' 10"
  - J - 10' 7"
  - K - 12' 0" ①
  - K - 12' 9" ②
  - L - 26' 8"
  - M - 14' 8"
  - N - 57' 6"
  - P - 9' 9"
  - V - 13' 1"
- Over-all Width - 9' 0"



- ① Over-all Height Equipped with Low Gantry
- ② Over-all Height Retractable Gantry, Lowered

**BASIC REMOVABLE COMPONENTS**

- (1) Removable Counterweight - 13,200 lbs.
- (2) 34" Deep Boom - 3,550 lbs.
- (3) Rear Outrigger Box with Beams - 3,070 lbs.
- (4) Rear Outrigger Beams only - 950 lbs.
- (5) Front Outrigger Box with Beams - 2,500 lbs.
- (6) Front Outrigger Beams only - 950 lbs.

MACHINE SET-UP	TOTAL WEIGHT	AXLE LOADINGS IN POUNDS			
		UPPER FACING FRONT		UPPER FACING REAR	
		FRONT	REAR	FRONT	REAR
Complete with 34" Deep Boom* .....	63,160#	8,730#	54,430#	20,000#	43,160#
With (1) removed .....	49,960	13,730	36,230	11,140	38,820
With (2) removed .....	59,610	3,930	55,680	23,760	35,850
With (3) removed .....	60,090	9,660	50,430	20,930	39,160
With (4) removed .....	62,210	9,020	53,190	20,290	41,920
With (5) removed .....	60,660	7,250	53,410	18,520	42,140
With (6) removed .....	62,210	8,170	54,040	19,440	42,770
With (1) (2) removed .....	46,410	8,930	37,480	14,900	31,510
With (1) (2) (3) removed .....	43,340	9,860	33,480	15,830	27,510
With (1) (2) (3) (5) removed .....	40,840	8,380	32,460	14,350	26,490
With (1) (2) (3) (6) removed .....	42,390	9,300	33,090	15,270	27,120
With (1) (2) (4) (6) removed .....	44,510	8,660	35,850	14,630	29,880
With (1) (2) (4) (5) removed .....	42,960	7,740	35,220	13,710	29,250
With (1) (3) removed .....	46,890	14,660	32,230	12,070	34,820
With (1) (3) (5) removed .....	44,390	13,180	31,210	10,590	33,800
With (1) (3) (6) removed .....	45,940	14,100	31,840	11,510	34,430
With (1) (4) (6) removed .....	48,060	13,460	34,600	10,870	37,190
With (1) (4) (5) removed .....	46,510	12,540	33,970	9,950	36,560
With (1) (4) removed .....	49,010	14,020	34,990	11,430	37,580
With (1) (5) removed .....	47,460	12,250	35,210	9,660	37,800
With (1) (6) removed .....	49,010	13,170	35,840	10,580	38,430
With (2) (3) removed .....	56,540	4,860	51,680	24,690	31,850
With (2) (3) (5) removed .....	54,040	3,380	50,660	23,210	30,830
With (2) (3) (6) removed .....	55,590	4,300	51,290	24,130	31,460
With (2) (4) (5) removed .....	56,160	2,740	53,420	22,570	33,590
With (3) (5) removed .....	57,590	8,180	49,410	19,450	38,140
With (3) (6) removed .....	59,140	9,100	50,040	20,370	38,770
With (4) (5) removed .....	59,710	7,540	52,170	18,810	40,900
With (4) (6) removed .....	61,260	8,460	52,800	19,730	41,530

\*Complete machine includes UPPER WORKS, CARRIER, and CRANE ATTACHMENT as described in these three sections in the current HC-78A price list.

If machine is not set-up as the complete standard machine described in the preceding note, add or subtract the following weights for this optional equipment.

OPTIONAL EQUIPMENT WHICH CHANGES WEIGHT OF STANDARD MACHINE	WEIGHTS TO BE ADDED TO OR DEDUCTED FROM AXLE LOADINGS				
	ITEM WEIGHT	UPPER FACING FRONT		UPPER FACING REAR	
		FRONT	REAR	FRONT	REAR
Front Drum Reversing Clutch .....	+ 300	+ 40	+ 260	+ 50	+ 250
Rear Drum Reversing Clutch .....	+ 340	-	+ 340	+ 100	+ 240
Third Drum - Complete .....	+ 710	+ 160	+ 550	+ 50	+ 660
Pontoons (Screw Type, set of four) .....	+ 300	+ 100	+ 200	+ 100	+ 200
Pontoon Screw Jacks (Set of four) .....	+ 600	+ 90	+ 510	+ 90	+ 510
*Front Hydraulic Outriggers (with pontoons) .....	+ 1,350	+ 800	+ 550	+ 800	+ 550
*Rear Hydraulic Outriggers (with pontoons) .....	+ 1,350	- 410	+ 1,760	- 410	+ 1,760
Low Gantry .....	- 760	+ 210	- 970	- 440	- 320
*In addition to standard outrigger boxes and beams					

NOTE: Due to variances in weights of castings and fabrications, and because the weights used are based on computations, these axle loadings should be considered approximate.

### LINK-BELT SPEEDER

Link-Belt Speeder  
Cedar Rapids, Iowa

Link-Belt Speeder (Canada), Ltd.  
Woodstock, Ontario

# HC-78A 3-AXLE CARRIER AXLE LOADING CHART (C.C.C. 8' AXLE)

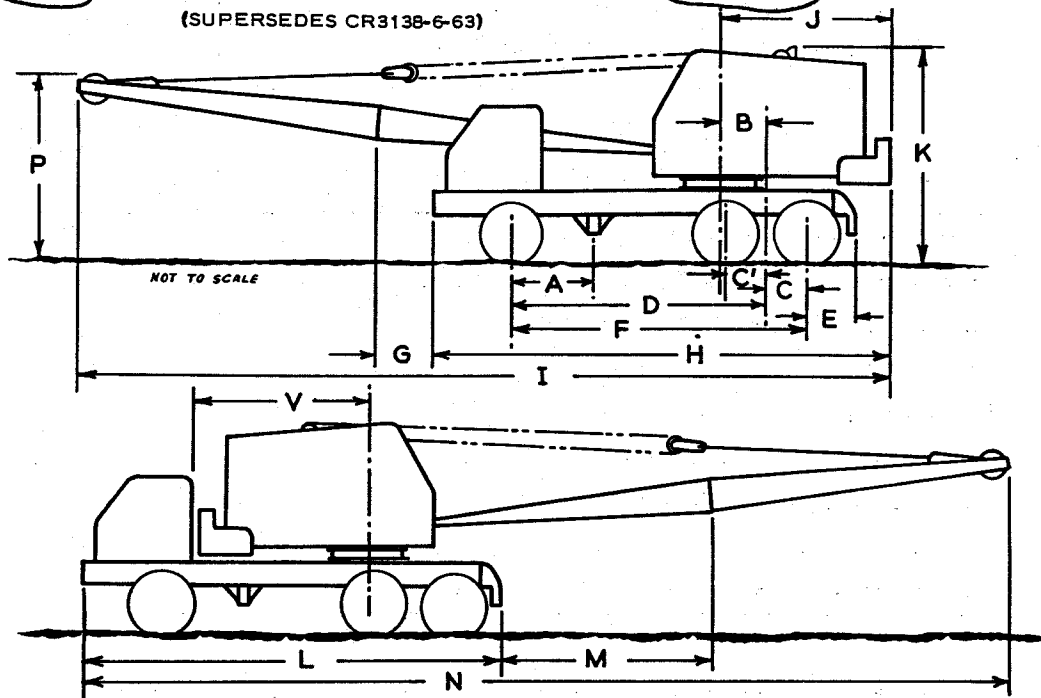
**LINK-BELT  
SPEEDER**

(SUPERSEDES CR3138-6-63)

**INDEX TO ILLUSTRATIONS**

**Dimensions:**

- A - 6' 11"
  - B - 2' 6"
  - C - 2' 3"
  - C' - 2' 3"
  - D - 17' 1" Wheelbase
  - E - 3' 8"
  - F - 19' 4"
  - G - 4' 10"
  - H - 28' 8"
  - I - 49' 8"
  - J - 10' 5"
  - K - 12' 0" ①
  - K - 12' 9" ②
  - L - 26' 8"
  - M - 14' 8"
  - N - 57' 6"
  - P - 9' 9"
  - V - 13' 1"
- Over-all Width - 8' 0"



- ① Over-all Height Equipped with Low Gantry
- ② Over-all Height Retractable Gantry, Lowered

**BASIC REMOVABLE COMPONENTS**

- (1) Removable Counterweight - 11,000 lbs.
- (2) 34" Deep Boom - 3,550 lbs.
- (3) Rear Outrigger Box with Beams - 2,780 lbs.
- (4) Rear Outrigger Beams only - 900 lbs.
- (5) Front Outrigger Box with Beams - 2,140 lbs.
- (6) Front Outrigger Beams only - 900 lbs.

MACHINE SET-UP	TOTAL WEIGHT	AXLE LOADINGS IN POUNDS			
		UPPER FACING FRONT		UPPER FACING REAR	
		FRONT	REAR	FRONT	REAR
Complete with 34" Deep Boom*	60,410#	9,380#	51,030#	18,340#	42,070#
With (1) removed	49,410	13,530	35,880	10,940	38,470
With (2) removed	56,860	4,580	52,280	22,100	34,760
With (3) removed	57,630	10,220	47,410	19,180	38,450
With (4) removed	59,510	9,650	49,860	18,610	40,900
With (5) removed	58,270	8,100	50,170	17,060	41,210
With (6) removed	59,510	8,840	50,670	17,800	41,710
With (1) (2) removed	45,860	8,730	37,130	14,700	31,160
With (1) (2) (3) removed	43,080	9,570	33,510	15,540	27,540
With (1) (2) (3) (5) removed	40,940	8,290	32,650	14,260	26,680
With (1) (2) (3) (6) removed	42,180	9,030	33,150	15,000	27,180
With (1) (2) (4) (6) removed	44,060	8,460	35,600	14,430	29,630
With (1) (2) (4) (5) removed	42,820	7,720	35,100	13,690	29,130
With (1) (3) removed	46,630	14,370	32,260	11,780	34,850
With (1) (3) (5) removed	44,490	13,090	31,400	10,500	33,990
With (1) (3) (6) removed	45,730	13,830	31,900	11,240	34,490
With (1) (4) (6) removed	47,610	13,260	34,350	10,670	36,940
With (1) (4) (5) removed	46,370	12,520	33,850	9,930	36,440
With (1) (4) removed	48,510	13,800	34,710	11,210	37,300
With (1) (5) removed	47,270	12,250	35,020	9,660	37,610
With (1) (6) removed	48,510	12,990	35,520	10,400	38,110
With (2) (3) removed	54,080	5,420	48,660	22,940	31,140
With (2) (3) (5) removed	51,940	4,140	47,800	21,660	30,280
With (2) (3) (6) removed	53,180	4,880	48,300	22,400	30,780
With (2) (4) (5) removed	53,820	3,570	50,250	21,090	32,730
With (3) (5) removed	55,490	8,940	46,550	17,900	37,590
With (3) (6) removed	56,730	9,680	47,050	18,640	38,090
With (4) (5) removed	57,370	8,370	49,000	17,330	40,040
With (4) (6) removed	58,610	9,110	49,500	18,070	40,540

\*Complete machine includes UPPER WORKS, CARRIER, and CRANE ATTACHMENT as described in these three sections in the current HC-78A price list.

If machine is not set-up as the complete standard machine described in the preceding note, add or subtract the following weights for this optional equipment.

OPTIONAL EQUIPMENT WHICH CHANGES WEIGHT OF STANDARD MACHINE	WEIGHTS TO BE ADDED TO OR DEDUCTED FROM AXLE LOADINGS				
	ITEM WEIGHT	UPPER FACING FRONT		UPPER FACING REAR	
		FRONT	REAR	FRONT	REAR
Front Drum Reversing Clutch .....	+ 300	+ 40	+ 260	+ 50	+ 250
Rear Drum Reversing Clutch .....	+ 340	-	+ 340	+ 100	+ 240
Third Drum - Complete .....	+ 710	+ 160	+ 550	+ 50	+ 660
Pontoons (Screw Type, set of four) .....	+ 300	+ 100	+ 200	+ 100	+ 200
Pontoon Screw Jacks (Set of four) .....	+ 600	+ 90	+ 510	+ 90	+ 510
*Front Hydraulic Outriggers (with pontoons) .....	+ 1,350	+ 800	+ 550	+ 800	+ 550
*Rear Hydraulic Outriggers (with pontoons) .....	+ 1,350	- 410	+ 1,760	- 410	+ 1,760
Low Gantry .....	- 760	+ 210	- 970	- 440	- 320
*In addition to standard outrigger boxes and beams					

NOTE: Due to variances in weights of castings and fabrications, and because the weights used are based on computations, these axle loadings should be considered approximate.

**LINK-BELT SPEEDER**

Link-Belt Speeder  
Cedar Rapids, Iowa

Link-Belt Speeder (Canada), Ltd.  
Woodstock, Ontario

# HC-78A 4-AXLE CARRIER AXLE LOADING CHART (C.C.C. 8' AXLE)

(SUPERSEDES CR3141-6-63)

5

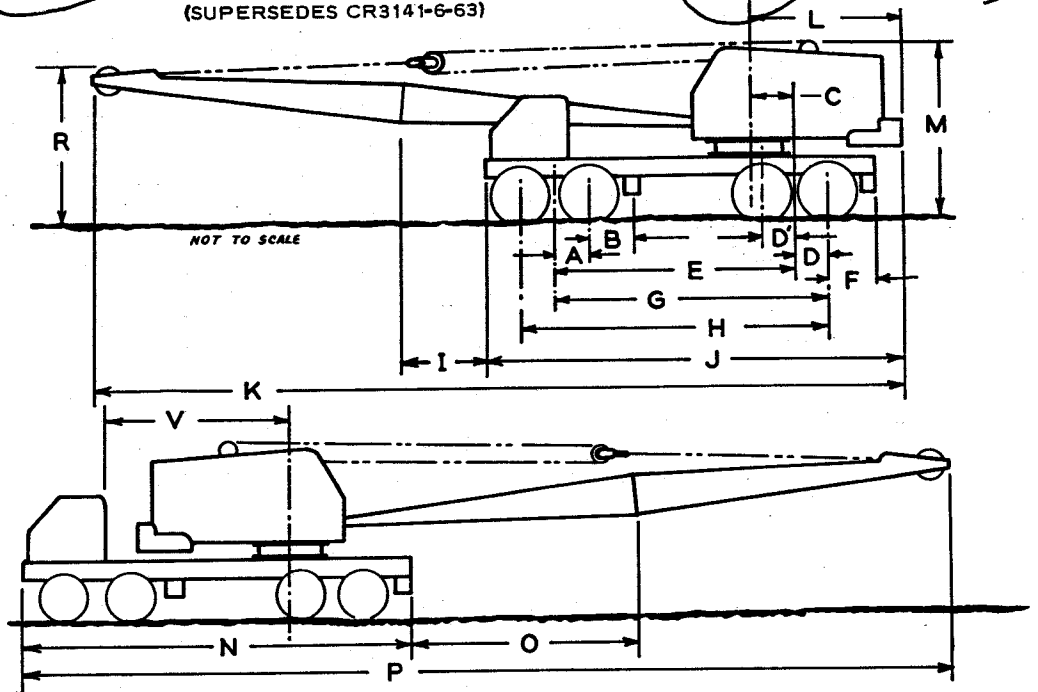
**LINK-BELT  
SPEEDER**

## INDEX TO ILLUSTRATIONS

Dimensions:

- A - 2' 3"
- B - 3' 3"
- C - 2' 6"
- D - 2' 3"
- D' - 2' 3"
- E - 15' 8" Wheelbase
- F - 3' 8"
- G - 17' 11"
- H - 20' 2"
- I - 4' 0"
- J - 29' 8"
- K - 49' 10"
- L - 10' 7"
- M - 12' 0" ①
- M - 12' 9" ②
- N - 27' 6"
- O - 14' 8"
- P - 58' 4"
- R - 9' 11"
- V - 13' 11"

Over-all Width - 9' 0"



- ① Over-all Height Equipped with Low Gantry
- ② Over-all Height Retractable Gantry, Lowered

## BASIC REMOVABLE COMPONENTS

- (1) Removable Counterweight - 13,200 lbs.
- (2) 34" Deep Boom - 3,550 lbs.
- (3) Rear Outrigger Box with Beams - 3,070 lbs.
- (4) Rear Outrigger Beams only - 950 lbs.
- (5) Front Outrigger Box with Beams - 2,500 lbs.
- (6) Front Outrigger Beams only - 950 lbs.

MACHINE SET-UP	TOTAL WEIGHT	AXLE LOADINGS IN POUNDS			
		UPPER FACING FRONT		UPPER FACING REAR	
		FRONT	REAR	FRONT	REAR
Complete with 34" Deep Boom*	64,710#	10,970#	53,740#	23,230#	41,480#
With (1) removed	51,510	16,420	35,090	13,570	37,940
With (2) removed	61,160	5,740	55,420	27,330	33,830
With (3) removed	61,640	11,980	49,660	24,240	37,400
With (4) removed	63,760	11,280	52,480	23,540	40,220
With (5) removed	62,210	9,350	52,860	21,610	40,600
With (6) removed	63,760	10,350	53,410	22,610	41,150
With (1) (2) removed	47,960	11,190	36,770	17,670	30,290
With (1) (2) (3) removed	44,890	12,200	32,690	18,680	26,210
With (1) (2) (3) (5) removed	42,390	10,580	31,810	17,060	25,330
With (1) (2) (3) (6) removed	43,940	11,580	32,360	18,060	25,880
With (1) (2) (4) (6) removed	46,060	10,880	35,180	17,360	28,700
With (1) (2) (4) (5) removed	44,510	9,880	34,630	16,360	28,150
With (1) (3) removed	48,440	17,430	31,010	14,580	33,860
With (1) (3) (5) removed	45,940	15,810	30,130	12,960	32,980
With (1) (3) (6) removed	47,490	16,810	30,680	13,960	33,530
With (1) (4) (6) removed	49,610	16,110	33,500	13,260	36,350
With (1) (4) (5) removed	48,060	15,110	32,950	12,260	35,800
With (1) (4) removed	50,560	16,730	33,830	13,880	36,680
With (1) (5) removed	49,010	14,800	34,210	11,950	37,060
With (1) (6) removed	50,560	15,800	34,760	12,950	37,610
With (2) (3) removed	58,090	6,750	51,340	28,340	29,750
With (2) (3) (5) removed	55,590	5,130	50,460	26,720	28,870
With (2) (3) (6) removed	57,140	6,130	51,010	27,720	29,420
With (2) (4) (5) removed	57,710	4,430	53,280	26,020	31,690
With (3) (5) removed	59,140	10,360	48,780	22,620	36,520
With (3) (6) removed	60,690	11,360	49,330	23,620	37,070
With (4) (5) removed	61,260	9,660	51,600	21,920	39,340
With (4) (6) removed	62,810	10,660	52,150	22,920	39,890

\*Complete machine includes UPPER WORKS, CARRIER, and CRANE ATTACHMENT as described in these three sections in the current HC-78A price list.

(Over)



If the machine is not set-up as the complete standard machine described in the preceding note, add or subtract the following weights for this optional equipment.

OPTIONAL EQUIPMENT WHICH CHANGES WEIGHT OF STANDARD MACHINE	WEIGHTS TO BE ADDED TO OR DEDUCTED FROM AXLE LOADINGS				
	ITEM WEIGHT	UPPER FACING FRONT		UPPER FACING REAR	
		FRONT	REAR	FRONT	REAR
Front Drum Reversing Clutch .....	+ 300	+ 40	+ 260	+ 60	+ 240
Rear Drum Reversing Clutch .....	+ 340	-	+ 340	+ 110	+ 230
Third Drum - Complete .....	+ 710	+ 170	+ 540	+ 60	+ 650
Pontoons (Screw Type, set of four) .....	+ 300	+ 100	+ 200	+ 100	+ 200
Pontoon Screw Jacks (Set of four) .....	+ 600	+ 100	+ 500	+ 100	+ 500
*Front Hydraulic Outriggers (with pontoons) .....	+ 1,350	+ 875	+ 475	+ 875	+ 475
*Rear Hydraulic Outriggers (with pontoons) .....	+ 1,350	- 445	+ 1,795	- 445	+ 1,795
Low Gantry .....	- 760	+ 230	- 990	- 480	- 280
*In addition to standard outrigger boxes and beams					

NOTE: Due to variances in weights of castings and fabrications, and because the weights used are based on computations, these axle loadings should be considered approximate.

### LINK-BELT SPEEDER

Link-Belt Speeder  
Cedar Rapids, Iowa

Link-Belt Speeder (Canada), Ltd.  
Woodstock, Ontario

**LINK-BELT  
SPEEDER**

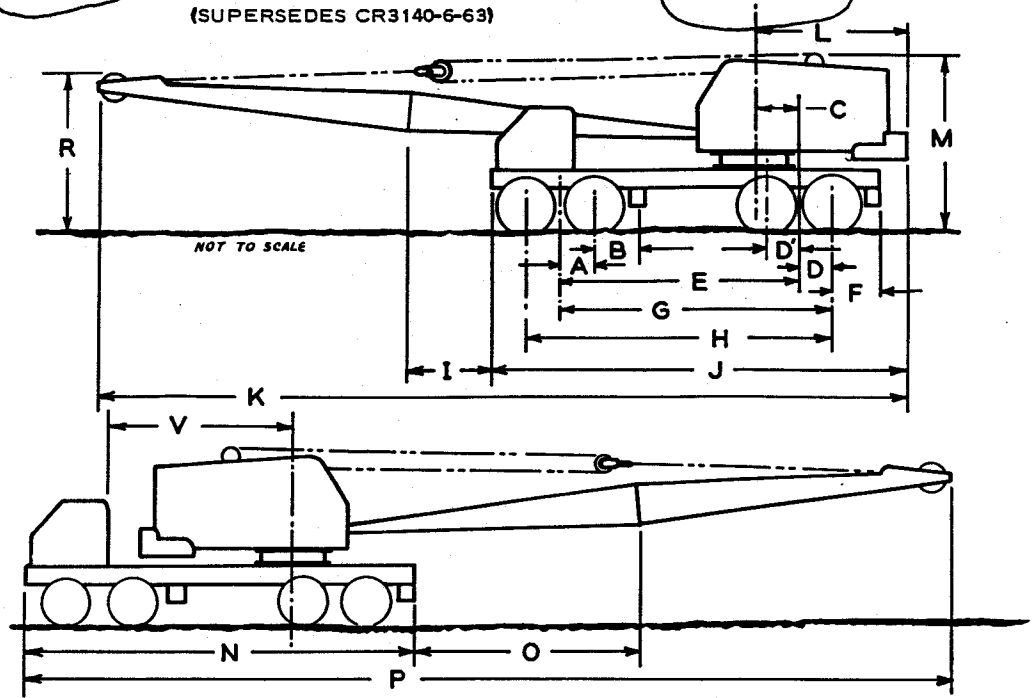
**HC-78A 4-AXLE CARRIER AXLE LOADING CHART (C.C.C. 8' AXLE)**

(SUPERSEDES CR3140-6-63)

**INDEX TO ILLUSTRATIONS**

**Dimensions:**

- A - 2' 3"
- B - 3' 3"
- C - 2' 6"
- D - 2' 3"
- D<sup>1</sup> - 2' 3"
- E - 15' 8" Wheelbase
- F - 3' 8"
- G - 17' 11"
- H - 20' 2"
- I - 4' 0"
- J - 29' 6"
- K - 49' 8"
- L - 10' 5"
- M - 12' 0" ①
- M - 12' 9" ②
- N - 27' 6"
- O - 14' 8"
- P - 58' 4"
- R - 9' 11"
- V - 13' 11"



- ① Over-all Height Equipped with Low Gantry
- ② Over-all Height Retractable Gantry, Lowered

**BASIC REMOVABLE COMPONENTS**

- Over-all Width - 8' 0" (1) Removable Counterweight - 11,000 lbs. (4) Rear Outrigger Beams only - 950 lbs.
- (2) 34" Deep Boom - 3,550 lbs. (5) Front Outrigger Box with Beams - 2,190 lbs.
- (3) Rear Outrigger Box with Beams - 2,830 lbs. (6) Front Outrigger Beams only - 950 lbs.

MACHINE SET-UP	TOTAL WEIGHT	AXLE LOADINGS IN POUNDS			
		UPPER FACING FRONT		UPPER FACING REAR	
		FRONT	REAR	FRONT	REAR
Complete with 34" Deep Boom*	61,710#	11,630#	50,080#	21,370#	40,340#
With (1) removed	50,710	16,170	34,540	13,320	37,390
With (2) removed	58,160	6,400	51,760	25,470	32,690
With (3) removed	58,880	12,560	46,320	22,300	36,580
With (4) removed	60,760	11,940	48,820	21,680	39,080
With (5) removed	59,520	10,210	49,310	19,950	39,570
With (6) removed	60,760	11,010	49,750	20,750	40,010
With (1) (2) removed	47,160	10,940	36,220	17,420	29,740
With (1) (2) (3) removed	44,330	11,870	32,460	18,350	25,980
With (1) (2) (3) (5) removed	42,140	10,450	31,690	16,930	25,210
With (1) (2) (3) (6) removed	43,380	11,250	32,130	17,730	25,650
With (1) (2) (4) (6) removed	45,260	10,630	34,630	17,110	28,150
With (1) (2) (4) (5) removed	44,020	9,830	34,190	16,310	27,710
With (1) (3) removed	47,880	17,100	30,780	14,250	33,630
With (1) (3) (5) removed	45,690	15,680	30,010	12,830	32,860
With (1) (3) (6) removed	46,930	16,480	30,450	13,630	33,300
With (1) (4) (6) removed	48,810	15,860	32,950	13,010	35,800
With (1) (4) (5) removed	47,570	15,060	32,510	12,210	35,360
With (1) (4) removed	49,760	16,480	33,280	13,630	36,130
With (1) (5) removed	48,520	14,750	33,770	11,900	36,620
With (1) (6) removed	49,760	15,550	34,210	12,700	37,060
With (2) (3) removed	55,330	7,330	48,000	26,400	28,930
With (2) (3) (5) removed	53,140	5,910	47,230	24,980	28,160
With (2) (3) (6) removed	54,380	6,710	47,670	25,780	28,600
With (2) (4) (5) removed	55,020	5,290	49,730	24,360	30,660
With (3) (5) removed	56,690	11,140	45,550	20,880	35,810
With (3) (6) removed	57,930	11,940	45,990	21,680	36,250
With (4) (5) removed	58,570	10,520	48,050	20,260	38,310
With (4) (6) removed	59,810	11,320	48,490	21,060	38,750

If the machine is not set-up as the complete standard machine described in the preceding note, add or subtract the following weights for this optional equipment.

8

OPTIONAL EQUIPMENT WHICH CHANGES WEIGHT OF STANDARD MACHINE	WEIGHTS TO BE ADDED TO OR DEDUCTED FROM AXLE LOADINGS				
	ITEM WEIGHT	UPPER FACING FRONT		UPPER FACING REAR	
		FRONT	REAR	FRONT	REAR
Front Drum Reversing Clutch .....	+ 300	+ 40	+ 260	+ 60	+ 240
Rear Drum Reversing Clutch .....	+ 340	-	+ 340	+ 110	+ 230
Third Drum - Complete .....	+ 710	+ 170	+ 540	+ 60	+ 650
Pontoons (Screw Type, set of four) .....	+ 300	+ 100	+ 200	+ 100	+ 200
Pontoon Screw Jacks (Set of four) .....	+ 600	+ 100	+ 500	+ 100	+ 500
*Front Hydraulic Outriggers (with pontoons) .....	+ 1,350	+ 875	+ 475	+ 875	+ 475
*Rear Hydraulic Outriggers (with pontoons) .....	+ 1,350	- 445	+ 1,795	- 445	+ 1,795
Low Gantry .....	- 760	+ 230	- 990	- 480	- 280
*In addition to standard outrigger boxes and beams					

**NOTE:** Due to variances in weights of castings and fabrications, and because the weights used are based on computations, these axle loadings should be considered approximate.

**LINK-BELT SPEEDER**

Link-Belt Speeder  
Eedar Rapids, Iowa

Link-Belt Speeder (Canada), Ltd.  
Woodstock, Ontario