



ROUGH TERRAIN CRANE RT 230-1

DATASHEET - IMPERIAL

RT 230-1



Features:

- ▶ Rated capacity:
30 ton @ 10 ft working radius
- ▶ Maximum boom length:
94 ft
- ▶ Maximum tip height:
140 ft

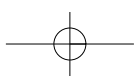
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RT 230-1

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KEY

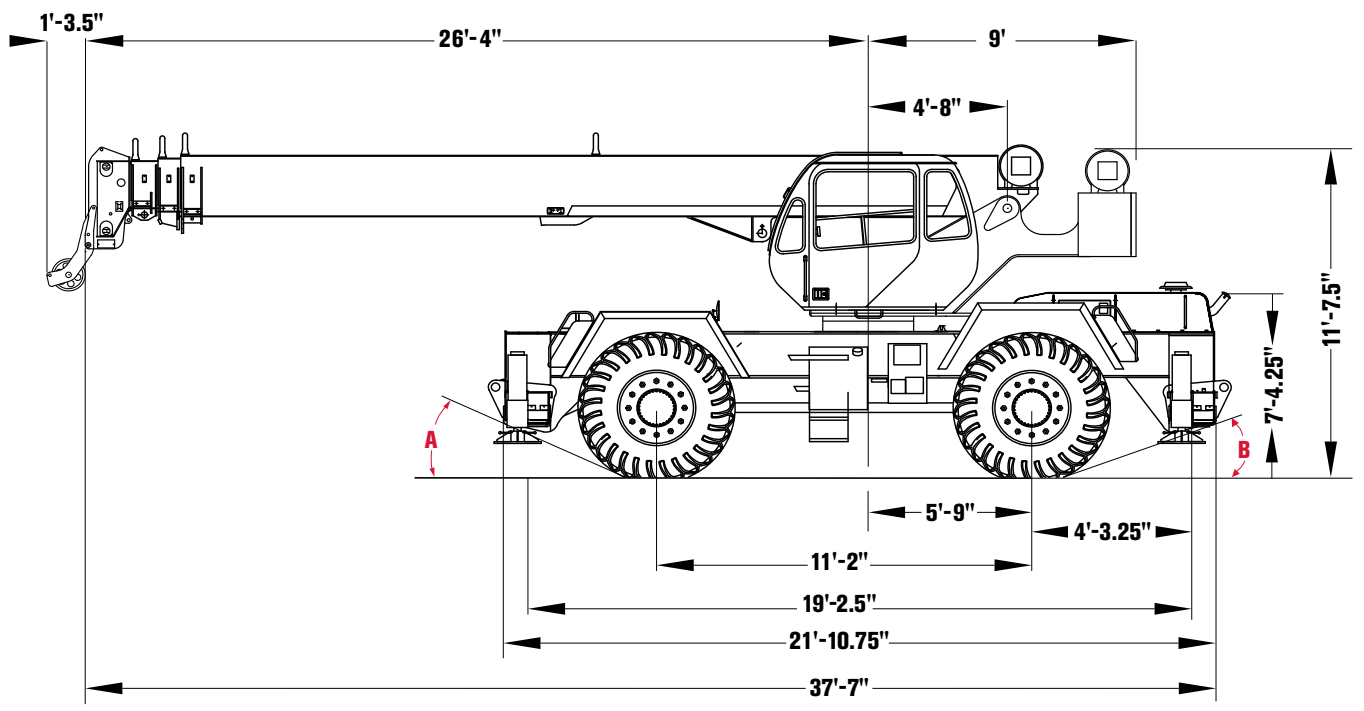
RT 230-1

	Counterweight		General performance
	Main boom		Telescoping mode
	Boom length		Boom luffing angle
	Tip height		Working radius
	Boom with extension		Max. boom length with extension
	Main boom with aux head		Distance from the hook to the head sheave pin
	Slewing / Allowable slewing range		Slewing locked / Slewing locked at specified position
	Slewing brake		Slewing gears
	Outriggers / Lifting on outriggers (100/50/0% extended)		Lifting on wheels / Pick & Carry
	Main hoist		Auxiliary hoist
	Hoist speed		Rope length
	Rope – Standard / Optional		Max. line pull
	Rope diameter		Tire
	Hook block		Controls
	Cab		Engine
	Operator aids / Load limiter / Load indicator		Steering
	Mechanical transmission		Speed
	Hydraulics		Heating / Air conditioning
	Working temperature		Gradeability
	Lights		Gross vehicle weight
	Crane / Crane in standard configuration		Weight on front axle
	Crane without counterweight		Weight on rear axle



CRANE DIMENSIONS

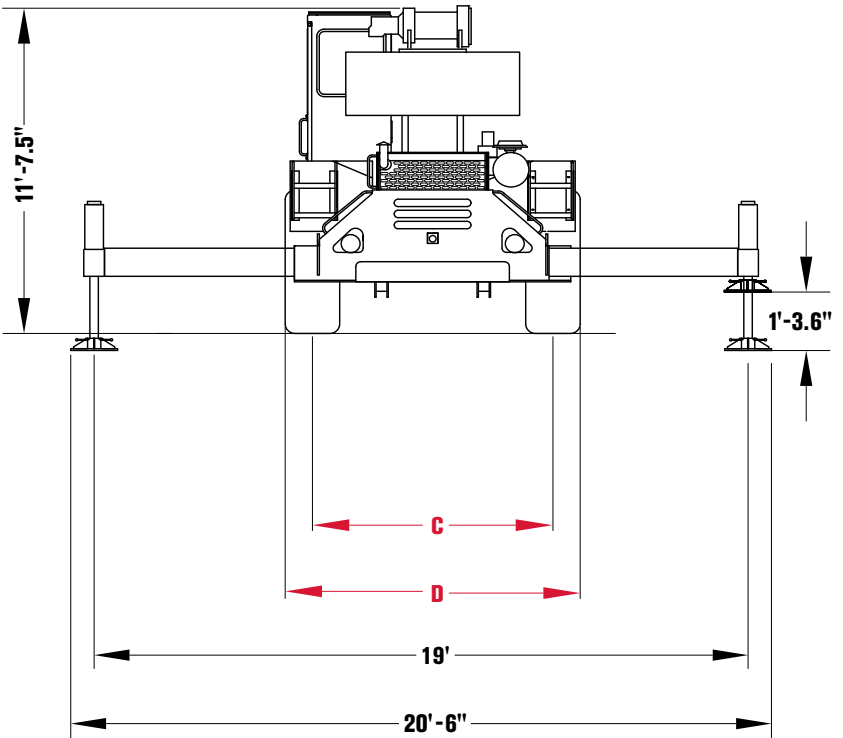
RT 230-1



Tire Variances	16.00 x 25	20.5 x 25
A (Approach Angle)	25.1°	25.1°
B (Departure Angle)	23.1°	23.1°
C (Tire Track)	6'-7.5"	6'-10.5"
D (Overall Width)	8'	8'-8"

Note:
All heights are based on 16.00 x 25 tires.

Outrigger Spread From Jack CL to Jack CL	
Fully Extended	19'
Mid-Position	13'-2"
Fully Retracted	7'-4.5"

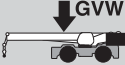
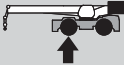
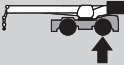
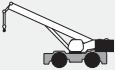




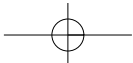
CRANE WEIGHTS

RT 230-1

Approximate Weights

				
		55,930 lb	28,972 lb	26,958 lb
Add / Subtract for main optional equipment				
	26 ft to 43 ft swing on jib stowed	+ 1500 lb	+ 2600 lb	- 1100 lb
	Auxiliary boom head	+ 100 lb	+ 300 lb	- 200 lb
	Auxiliary hoist*	+ 115 lb	- 25 lb	+ 140 lb
	4 sheaves, 30 T	+ 655 lb	+ 1071 lb	- 416 lb
	3 sheaves, 30 T	+ 670 lb	+ 1099 lb	- 429 lb
	2 sheaves, 25 T	+ 682 lb	+ 1117 lb	- 435 lb
	7 T Hookball	+ 240 lb	+ 290 lb	- 50 lb

NOTE: Values are subject to 2% variation
* Weight includes rope

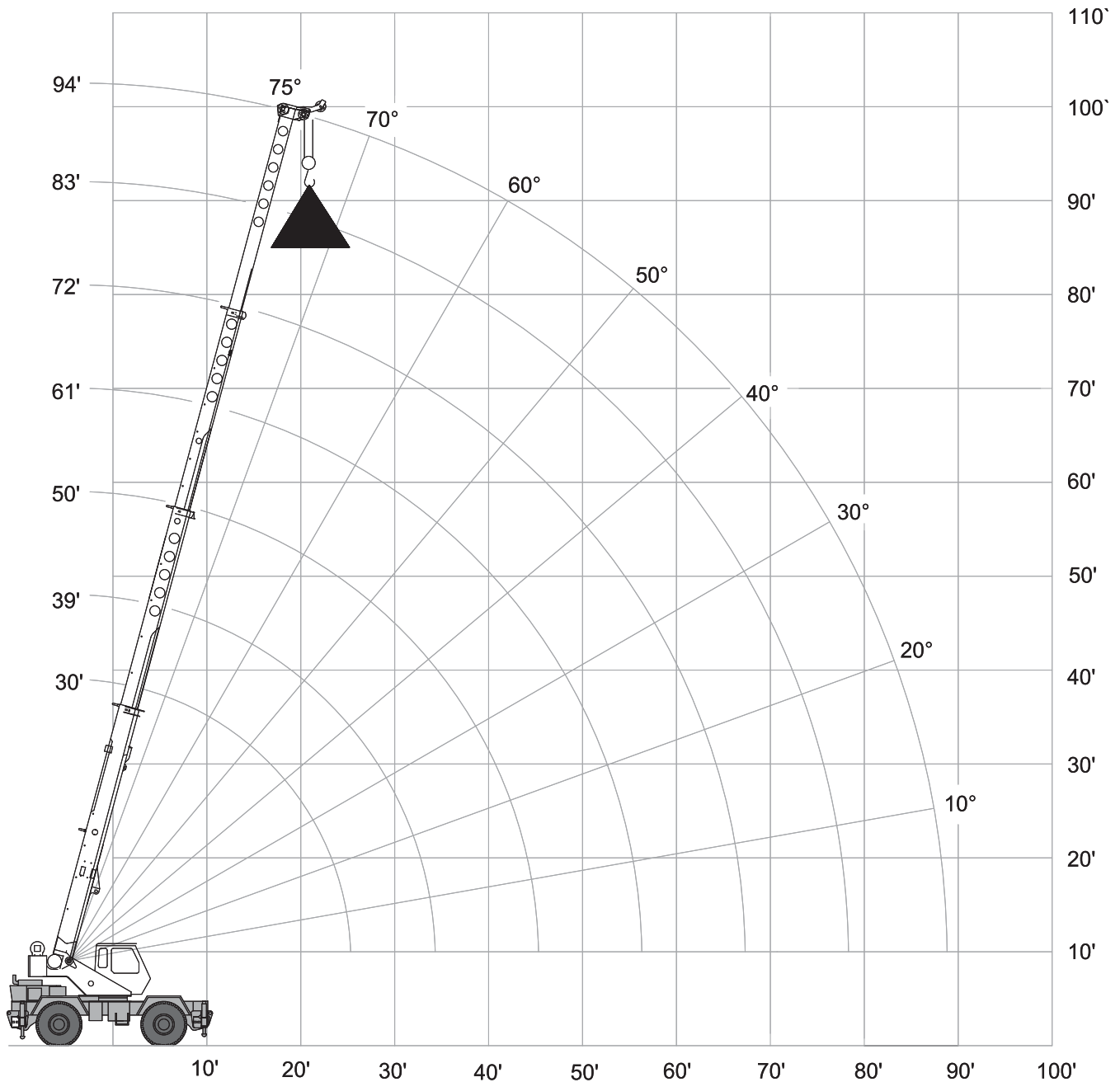
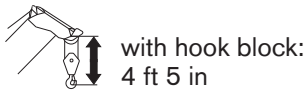
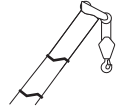




RANGE DIAGRAM – MAIN BOOM

RT230-1

Outriggers Fully Extended (100%)

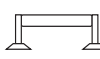


LOAD CHART – MAIN BOOM

RT230-1

Outriggers Fully Extended (100%)

10,000 lbs

19 ft (100%)

360°

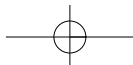
Standard ASME
B30.5

	Boom Length							
	30.29 ft	39 ft	50 ft	61 ft	72 ft	83 ft	94 ft	
ft	lbs	lbs	lbs	lbs	lbs	lbs	lbs	ft
10	60,000	46,500						10
12	50,000	46,500	44,400					12
15	40,000	39,900	38,400	35,900				15
20	30,000	29,900	29,900	29,400	27,300			20
25	22,700	23,500	23,900	23,900	23,000	18,900	15,200	25
30		18,500	19,000	19,300	19,500	15,800	13,000	30
35			15,000	12,000	15,400	13,700	11,300	35
40			11,700	9,700	12,200	11,900	9,900	40
45			9,200	7,800	9,800	9,900	8,700	45
50				6,400	8,000	8,200	7,800	50
55					6,700	6,800	6,900	55
60					5,500	5,700	5,700	60
65					4,500	4,700	4,800	65
70						4,000	4,100	70
75						3,300	3,400	75
80							2,800	80
85							2,300	85

Notes to lifting capacity

Lifting capacities do not exceed 85% of tipping load. Weight of hook blocks and slings is part of the load, and is to be deducted from the capacity ratings. Consult operation manual for further details.

Note: Data published herein is intended as a guide only and shall not be construed to warrant applicability for lifting purposes. Crane operation is subject to the computer charts and operation manual both supplied with the crane.

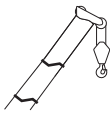




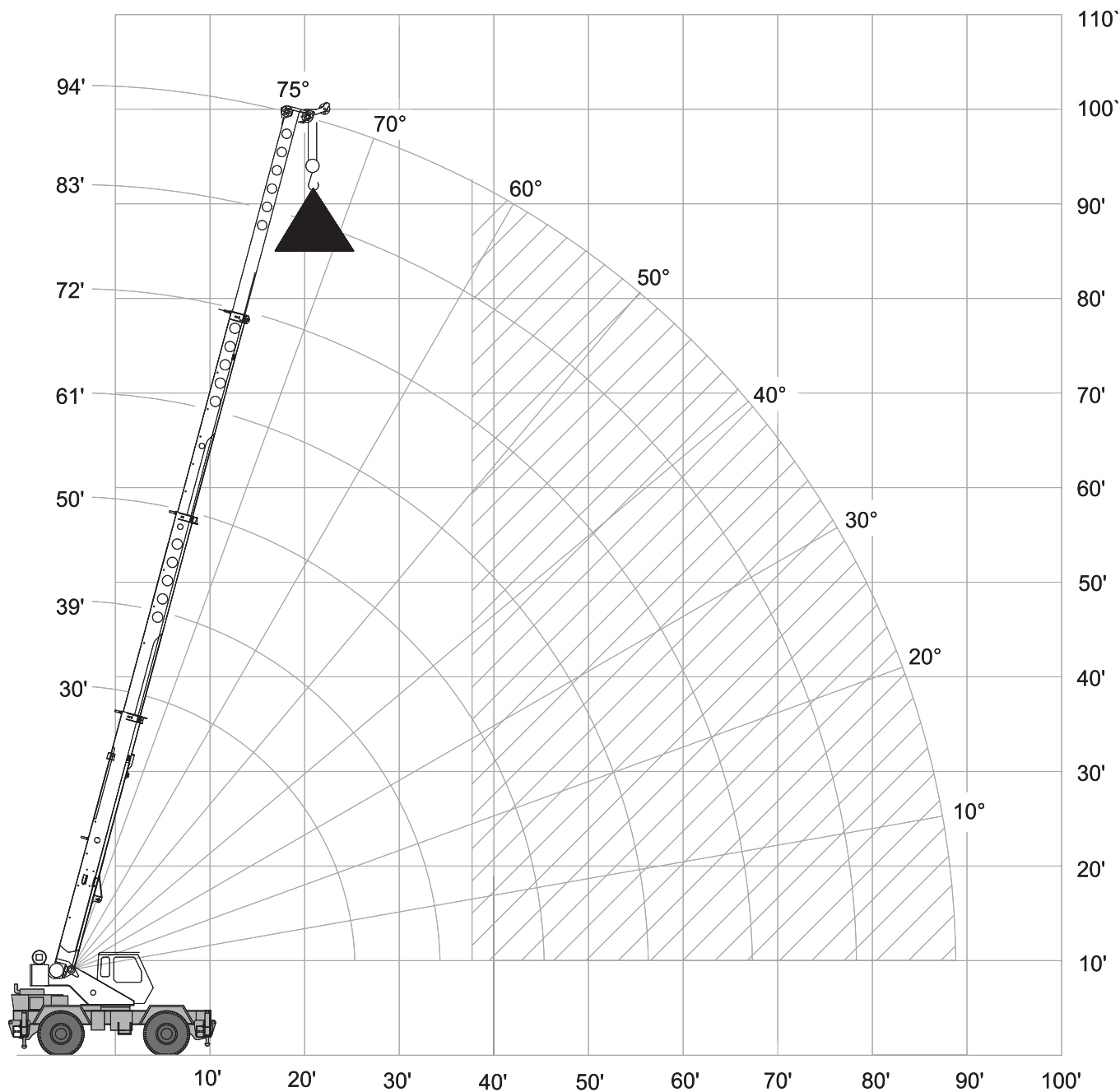
RANGE DIAGRAM – MAIN BOOM

RT230-1

Outriggers Fully Retracted (0%)



 with hook block:
4 ft 5 in

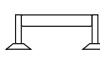


LOAD CHART – MAIN BOOM

RT230-1

Outriggers Fully Retracted (0%)

10,000 lbs

7 ft 4.5 in (0%)

360°

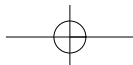
Standard ASME
B30.5

	Boom Length							
	30.29 ft	39 ft	50 ft	61 ft	72 ft	83 ft	94 ft	
ft	lbs	lbs	lbs	lbs	lbs	lbs	lbs	ft
10	32,700	33,300						10
12	23,500	24,100	24,500					12
15	15,700	16,400	16,800	17,000				15
20	9,000	9,700	10,200	10,400	10,500			20
25	5,200	6,100	6,600	6,800	7,000	7,100	7,100	25
30		3,800	4,300	4,600	4,800	4,900	5,000	30
35			2,800	3,100	3,300	3,400	3,500	35
40			1,600	2,000	2,200	2,300	2,400	40
45				1,100	1,300	1,400	1,500	45
50						800	900	50

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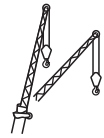
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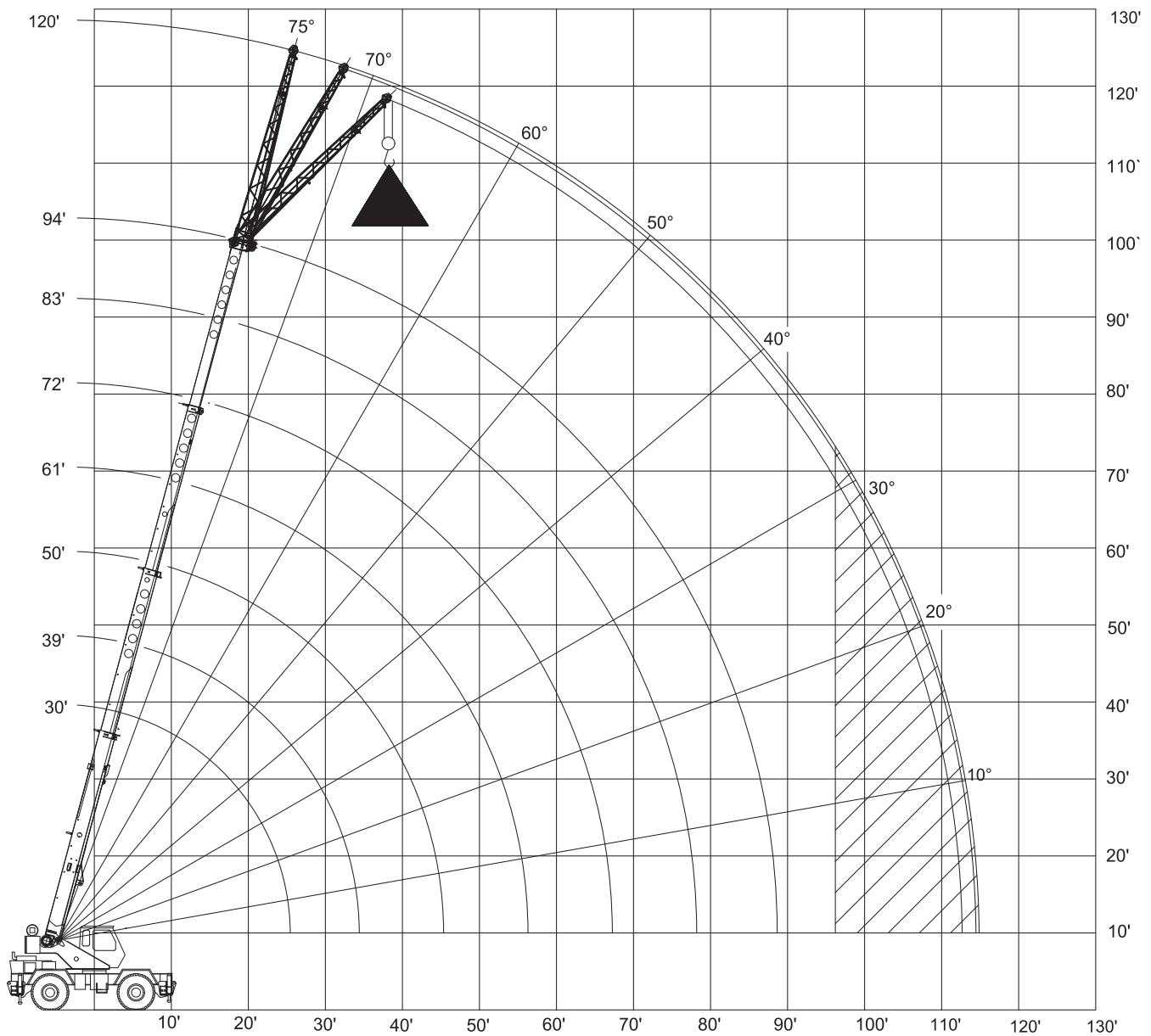
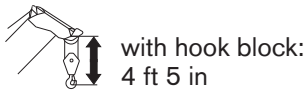


RANGE DIAGRAM – MAIN BOOM

RT230-1



With Jib, 26 ft offset

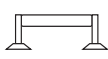


LOAD CHART – MAIN BOOM

RT230-1

With Jib, 26 ft offset

10,000 lbs

19 ft (100%)

360°

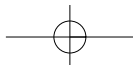
Standard ASME
B30.5

26 ft Offsettable Jib					
0°		15°		30°	
 ft	lbs	 ft	lbs	 ft	lbs
35	9,000	40	7,300	45	5,500
39	8,500	43	6,700	49	5,200
43	8,000	47	6,200	52	4,900
49	7,200	52	5,500	56	4,400
54	6,200	57	5,000	61	4,000
60	5,400	62	4,500	66	3,600
64	4,700	67	4,000	71	3,300
70	4,000	73	3,500	78	2,900
76	3,400	79	3,100	84	2,700
82	2,700	86	2,500	89	2,400
87	2,200	91	2,100	93	2,200
93	1,700	97	1,700	98	1,700
100	1,300	102	1,300	104	1,300
106	900	108	900		

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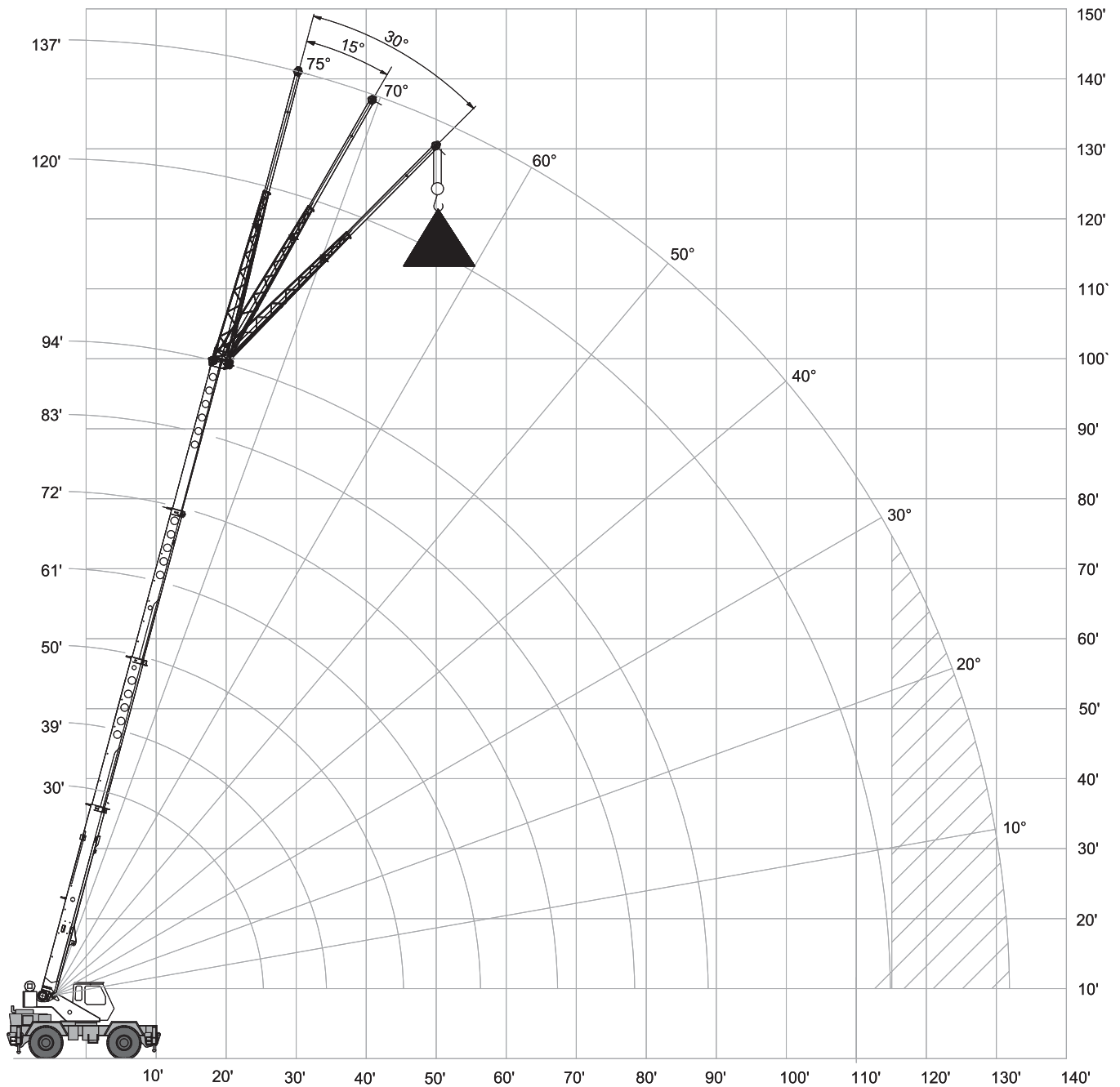
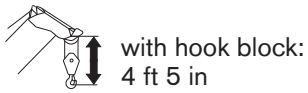
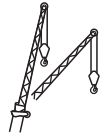




RANGE DIAGRAM – MAIN BOOM

RT230-1

With Jib, 43 ft offset

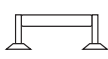


LOAD CHART – MAIN BOOM

RT230-1

With Jib, 43 ft offset

10,000 lbs

19 ft (100%)

360°

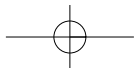
Standard ASME
B30.5

43 ft Offsettable Jib					
0°		15°		30°	
 ft	lbs	 ft	lbs	 ft	lbs
41	5,000	50	3,300	62	2,600
45	4,700	54	3,200	65	2,600
49	4,400	58	3,100	68	2,500
54	4,000	64	2,900	72	2,400
60	3,700	70	2,800	77	2,400
67	3,500	74	2,700	82	2,300
75	3,300	81	2,600	88	2,300
82	3,000	89	2,500	95	2,200
88	2,800	96	2,400	100	2,200
95	2,400	101	2,000	105	1,900
101	2,000	107	1,600	110	1,500
108	1,600	113	1,200	115	1,200
116	1,100	119	900	121	900

Notes to lifting capacity

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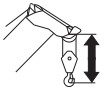




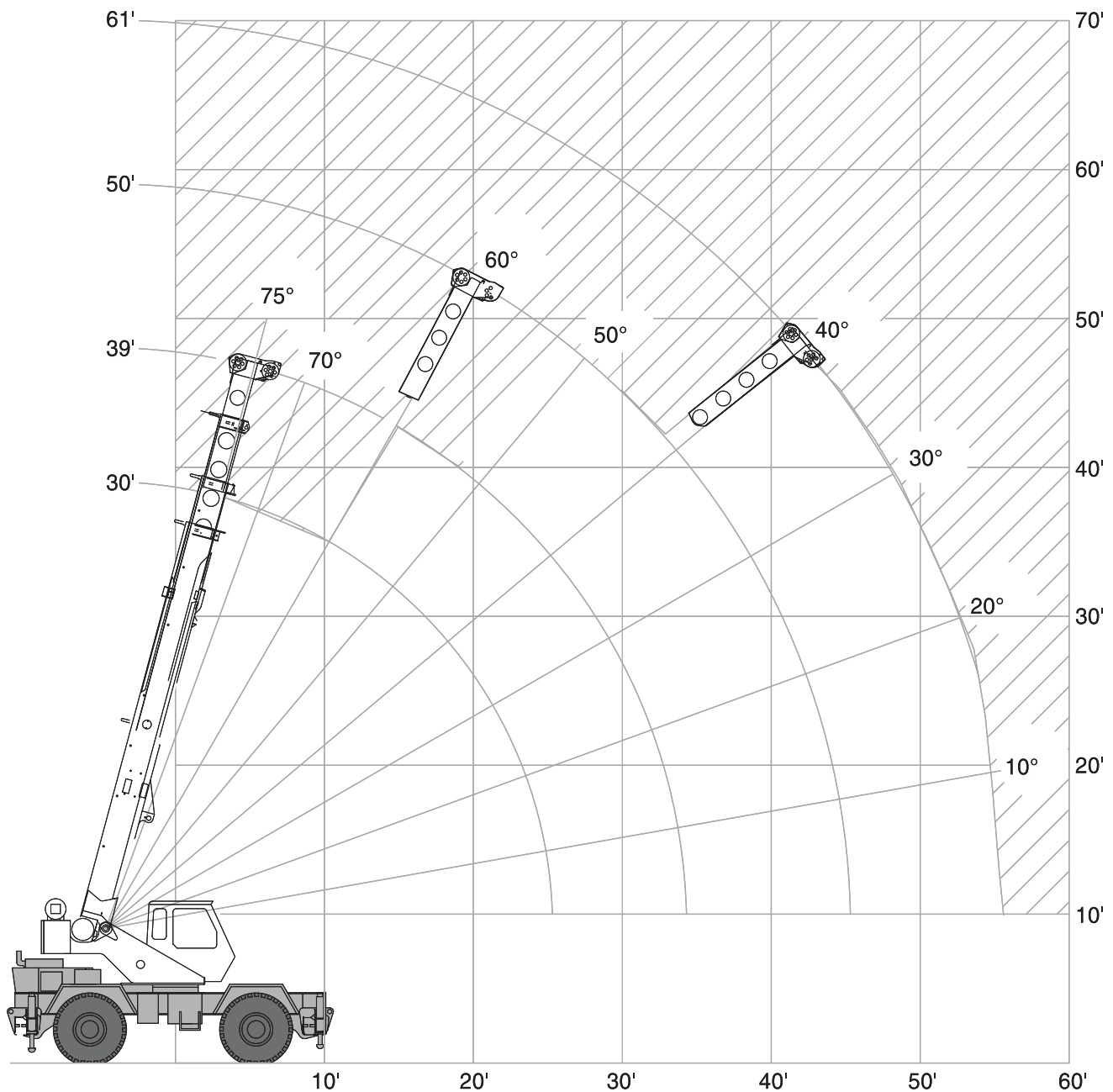
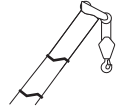
RANGE DIAGRAM – MAIN BOOM

RT230-1

On Tires



with hook block:
4 ft 5 in



TEREX®



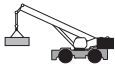
LOAD CHART – MAIN BOOM

RT230-1

On Tires

10,000 lbs

360°

On tires
20.50 x 25-24 PR

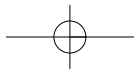
Standard ASME
B30.5

Boom		Travel Speed Boom straight over front		
Radius	Length	0 mph	Creep	2.5 mph
ft	ft	lbs	lbs	lbs
10	30.29	23,900	34,600	23,600
12	30.29	18,900	29,800	20,100
15	39	14,000	24,300	16,000
20	39	8,300	16,500	11,400
25	50	5,300	11,100	8,200
30	50	3,300	8,000	6,200
35	50	1,900	6,000	4,900
40	61	1,200	4,800	3,800
45	61		3,800	3,000
50	61		2,700	2,300
55	61		2,000	1,700
60	72		1,400	1,200
65	72		1,100	800

Notes to lifting capacity

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TECHNICAL DESCRIPTION

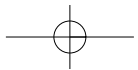
RT 230-1

Boom

Standard configuration:		
	4 sections hydraulic actuated boom	
	Full power mechanically synchronized	
	Min. / Max.	30 ft / 94 ft
	Boom elevation angle range (min. / max.)	-4° / 76°
Optional configuration:		
	Single sheave	
	One section, side stowable Angular offsets	0, 15 and 30 degrees
	With one section jib	120 ft
	With two section jib	147 ft

Hoist, Rope and Hook

Standard configuration:		
	Grooved drum Storage capacity	598 ft
	Two speed ratios Without load in 6 th layer (low range / high range) Without load in 1 st layer (low range / high range)	297 ft/min / 475 ft/min 205 ft/min / 329 ft/min
	6 x 19 IWRC XIPS, right regular lay, preformed	
		5/8 in
		479 ft
	Max. line pull; 1 st layer low-range Max. line pull permissible	35,800 lbs 9,000 lbs





TECHNICAL DESCRIPTION

RT 230-1

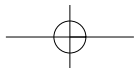
Optional configuration:			
	Hook and ball		7 ton
	2 sheaves		25 ton
	3 sheaves		30 ton
	4 sheaves		30 ton
	Grooved drum		
	Storage capacity		598 ft
	Without load in 6 th layer (low range / high range)	205 ft/min / 329 ft/min	
	Without load in 1 st layer (low range / high range)	297 ft/min / 475 ft/min	
	Rotation resistant compacted strand 18 x 19 or 19 x 19		
			5/8 in
			479 ft
	Minimum breaking strength	35,800 lbs	
	Max. line pull permissible	9,000 lbs	

Superstructure

Standard configuration:			
	Non stop		360°
	Maximum rotation speed without load		3 rpm
	Hydraulic motor		
	Planetary reducer		
	360° house lock		
	Manually actuated by foot pedal		

Cab, Controls, Operator aids and Load limiter / Load indicator

Standard configuration:			
	Sliding door		
	Tinted safety glass throughout		
	Six way adjustable seat		
	Armrest mounted dual axis electro-proportional joysticks		
	Steering wheel column with gear selector on the left and directional light selector on the right		
	Dashboard mounted switches for outrigger operation		
	Graphic interface for load indicator		





TECHNICAL DESCRIPTION

RT 230-1

Optional configuration:



- Heater
- Air conditioner
- Work lights
- Rotating beacon

Carrier, Engine, Drive-line and Hydraulic system

Standard configuration:



- Hydraulic, independent extension:
- Diameter of outrigger pads 24 in
- Area of outrigger pads 254 in²



- Cummins QSB4.5 4 cylinders
- Rated power 130 hp @ 2,300 rpm
- Maximum gross torque 459 ft·lb @ 1,500 rpm
- Intake: turbocharger with intercooler
- Fuel type Diesel
- Fuel tank capacity 50 gallons



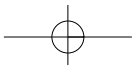
- 6 x 6 powershift transmission with integral torque converter
- Full time 4WD (Four-Wheel Drive)
- Rigid mounted front axle
- Oscillating rear axle
- Differential lock on front axle and rear axle
- Rear axle oscillation lock – manual or automatic actuation
- Air-over-hydraulic disc brakes
- Parking brake on front axle
- Hydraulic oil cooler on carrier



- Hydraulic power steering
- Front wheel steering
- Four wheel steering concentric
- Four wheel steering crab
- Optional rear wheel steering package



- Hydraulic Pumps:
- Tandem pumps:**
- Boom lift / Telescope 39 gal/min @ 3,500 psi
- Power steering / Outriggers and Swing 21 gal/min @ 2,500 psi
- Single pump:**
- Main and auxiliary hoist pump 53 gal/min @ 3,500 psi
- Hydraulic oil reservoir capacity 94 gallons
- Hydraulic oil suction filter 250 microns
- Hydraulic oil return filter 5 microns





TECHNICAL DESCRIPTION

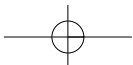
RT 230-1

Vehicle performance

Standard configuration:		
	Max. in 1 st gear	112.34 %
	Max. in 6 th gear	3.77 %
	Max. (6 th gear)	24.5 mph

Tires

Standard configuration:		
	Wide tread earth mover pattern (E3)	20.5 x 25-26 PR
Optional configuration:		
	Wide tread earth mover pattern (E3)	16.00 x 25-28 PR





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www.terexcranes.com

Effective Date: October 2010.

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Brochure Reference: TC-DS-I-E-RT230-1-10/10



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