# GROVE

# YB7700 Series





• 2 models ... YB7722 & YB7722XL

• 22 ton (19.9 mt) capacity 360° on outriggers @ 8.5 ft. (2.6m) radius

15 ton (13.6 mt) deck carrying capacity

• 15 ton (13.6 mt) on rubber capacity

• YB7722 - 43 ft. (13.1m) 3-section boom

YB7722XL - 67 ft. (20.43m) 5-section

• 17 ft. (5.18m) offsettable swingaway extension

• 130 bhp (97.0 kW) Cummins QSB4.5L (Tier III) diesel engine

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YB7722 / XL

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YB7722

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YB7722/XL (metric)

**Range Diagram** 

**DIN/ISO Load Chart** 

**Range Diagram** 

**DIN/ISO Load Chart** 





- Two position beam – jack style outriggers
- All beams or jacks can be extended or retracted at the same time



### Standard:

- Water-cooled Cummins QSB4.5L Turbo-charged diesel engine rated @ 130 BHP (97.0kW)
- Variable displacement piston pump w/piggyback gear pump.



- 43 ft. (13.1m) 3-section main boom or 67 ft. (20.42m) 5-section main boom
- 4-position pivoting boom head for low head room clearance
- · Quick reeve boom head and hookblock



Standard: Open air cab shell w/overhead safety

glass

Optional: Closed cab with hinged door, heater,

defroster, and glass



Standard: 4-wheel drive and 4-wheel steer and

crab steer with electronic self-

alignment

Standard: 17.5 X 25 bias ply tires



### **■**® Boom

YB7722: 19 ft. 6 in. - 43 ft. 0 in. (5.9m - 13.1m) three-section full power boom.

Maximum tip height: 51 ft. 8 in. (15.7m)

YB7722XL: 19 ft. 6 in. - 67 ft. 0 in. (5.9m - 20.4m) five-section full power boom.

Maximum tip height: 75 ft. 0 in. (22.8m)

Boom angle indicator mounted on both sides of base section.



### \*Boom Extension

17 ft. (5.18m) fixed boom extension, offsettable to 30° and 60° via pivoting boom nose.

Maximum tip height: 92 ft. 0 in. (28.0m)



# Boom Nose

2 sheave, 4-position (0°, + 30°, + 60°, + 80°) pivoting boom nose for minimizing head space requirements. Lowers head height 23.9 in. (0.60m) when nose is pivoted fully forward.



### Boom Elevation

Two double acting hydraulic cylinders with integral holding valve.

Elevation: 0° to 80°



### Anti-Two Block Device

Standard anti-two block device, when activated, provides an audible warning to the crane operator and disengages all crane functions whose movement can cause two-blocking.



# Load Indicator (wireless LSI)

A simple effective and easy to use load indicating system used in conjunction with the anti-two block system to assist the operator in efficient operation of the unit within the limits of the load chart. The display panel displays the hook load and warns the operator when a preset load capacity is exceeded. The warning is by a flashing light on the display panel. In conjunction with the load display panel (receiver), there is a wireless transmitter and load sensing pin attached to the boom head that transmits the hook load to the display panel.



# \*Rated Capacity Limiter (wireless RCL)

Similar to the Load Indicator, but stops the telescope out and boom lift down function when a load limit is exceeded. Uses a similar display panel with the addition of displaying boom angle and boom length read outs on the panel.



# \*Load Moment Indicator (hardwired LMI)

Digital display of boom angle, boom length, boom radius, capacity, and allows for operator input to set the limits based on load chart. Displays color coded light bar and audible alarm with function cutout if load exceeds entered parameters.

# T Swing

Ball bearing swing circle with 360° continuous rotation.

Planetary swing.

Maximum speed: 2.5 rpm



# | | Hydraulic System

Variable displacement piston pump and piggyback gear pump.

Combined flow: 74.0 gpm (280.0 Lpm)

Maximum system operating pressure: 3600 p.s.i.

Six section valve bank, chassis mounted, operated via dash mounted, pilot pressure hydraulic joysticks.

Return line filter with full flow by-pass protection and service indicator.

60.0 gallon (227 L) hydraulic reservoir with sight level gauge and steel side plating to guard against side impact damage.

# **Hoist Specifications**

Piston motor drive with spring applied / hyd. released brake. Two speed power up and down.

Maximum Single Line Pull: 13,800 lb. (6260kg) Maximum Single Line Speed: 320 fpm (97.5m/min) Maximum Permissible Single Line Pull: 11,000 lb (4990kg)

(5/8" [16.0mm] XIPS)

375 ft. (114.3m) Rope Length (Std):

\*Denotes optional equipment

# **specifications**



# Carrier

# [∄] Frame

High strength alloy steel constructed with integral outrigger housings; front and rear tie-down lugs. 60 ft.2 carrydeck size with 30,000 lb (13 608kg) deck only carrying capacity & 20,000 lb (9 072kg) combined with boom load. Deck coated with antiskid treatment.

# **L**Outriggers

2- stage hydraulic telescoping beam with vertical jack at the four corners provides extended and down and retracted and down lifting capacities. Integral holding valves on both beam and jack.

# Outrigger Controls

Three switch operation mounted on dash panel. One 3- position rocker switch to select all beams / jacks, left beams / jacks only, or right beams / jacks only. Separate 4- way toggle switch to activate beams out / in and jacks down / up. Level bubble indicator located inside operators compartment.

Outrigger pad size: 11.5 in. x 11.5 in. (29.2cmx29.2cm)

\*Independent outrigger controls available as an option.

# Std. Engine

Cummins QSB 4.5L turbo-charged diesel rated @ 130 bhp (97kW) @ 2500 rpm with engine block heater.

# Operators Control Station

Frame mounted, open air style control station with cab shell includes all crane functions, driving controls, and overhead safety glass. Other standard equipment includes a durable weather resistant seat with seat belt, hourmeter, sight level bubble, and fire extinguisher. The dash panel includes engine oil pressure gauge, engine water temperature gauge, fuel gauge, transmission low oil and high temperature warning lights, low battery warning light, and brake system low pressure warning light. The LSI (load indicator) receiver is mounted to the top of the dash.

# \*Operators Control Station Enclosed

Includes the standard cab shell with the addition of front, right and rear glass. Hinged full door with sliding glass.

Front windshield wiper, heater and defroster are included.

# Fuel Tank Capacity

50 gallon (189 L) all steel construction with steel side plate to guard against side impact. Fuel gauge located on dash panel in operators station.

# **5** Electrical System

One 12V maintenance free battery, 820CCA @ 0°. 63 amp alternator.

# Drive

4 x 4 - Front and rear axle drive with planetary hubs and limited slip differential.

# T Steer

Standard: 3-steering modes:

Front 2-wheel, 4-wheel coordinated, and crab steer w/ electronic self alignment. Rotary switch select on dash panel.

# C Transmission

Clark powershift 4-speeds forward and reverse. Stalk mounted shifter on left side of steering column.

# 이 Tires

17.5 x 25 Bias (std.)

\*17.5 R 25 radial

# O Brakes

Hydraulic actuated internal wet-disc service brakes acting on all four wheels. A dash mounted toggle switch activates the dry disc parking brake on the transmission output yoke with a dash warning light.

# Suspension

Front: Rigid mounted to frame.

Rear: Provides  $3.5^{\circ}$  oscillation for use on semi-rough terrain. Axle lock-out switch, on dash panel, to engage / disengage the axle lock-out. Axle lock-out must be engaged (locked) whenever picking on rubber and when traveling in the crab steer mode. A warning light indicates when the axle lock-outs are engaged.

# Lights

Recessed mounted, includes head, tail, rear work, stop, and turn

# $\underline{{oldsymbol {\mathbb V}}}$ Maximum Speed

19.5 MPH (31.3km/h)

# Gradeability\*\*

63%....no load

38%....30,000lb (13 608kg) load

### G.V.W.

YB7722: 41,270 lb. (18 720kg) YB7722XL: 43,000 lb (19 504kg)

### **Miscellaneous Standard Equipment**

Two sheaves, "Quick Reeve" style 22T (19.9mt) hookblock Back-up alarm

Dual rearview mirrors

Outrigger motion alarm

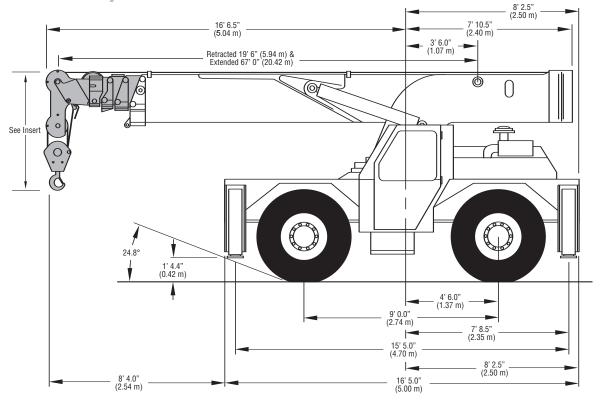
Lifting and tie down lugs

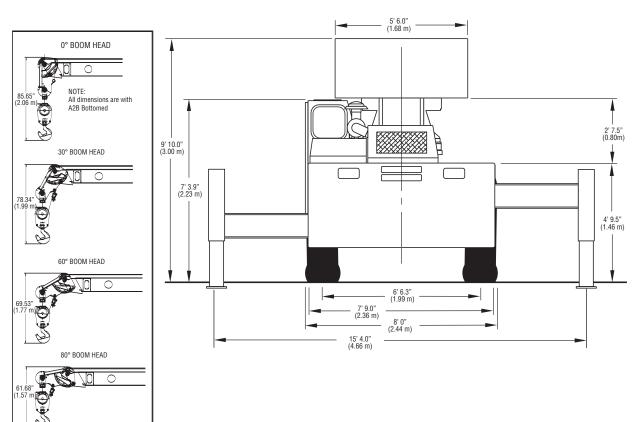
- \*Denotes optional equipment
- \*\*Theoretical



# dimensions

# YB7722 / XL

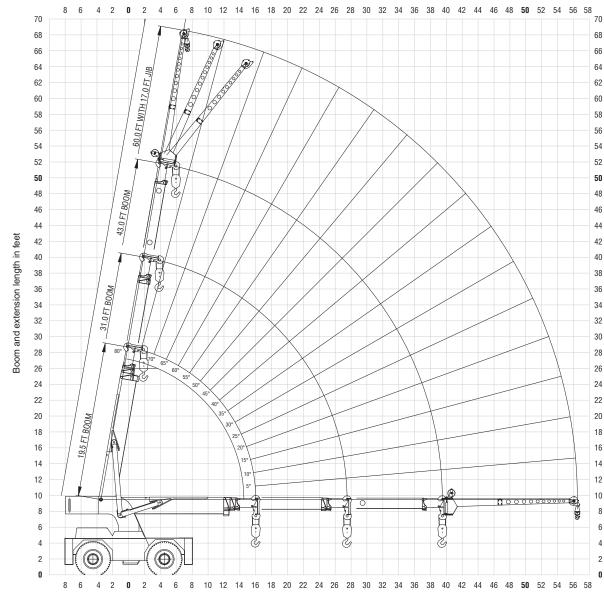




YB7700 Series

# range diagram

# YB7722 (3-section boom)



Operating Radius in feet from axis of rotation

# YB7700 Series

# YB7722 (3-section boom)

			MAIN BOOM LO	AD RAT	TINGS ON	OUTRIGGERS						MAIN BOOM
		Ext	ended and Down 3	860° or F	Retracted a	and Down Front/R	ear					R
	19.5 ft Boom 20.5-30 ft Boom 31 ft			Boom	32-42 ft Boom 43 ft Boom				19.5 ft Boom		20.5-30 ft Boo	
Radius (ft)	Boom Angle (deg)	Rated Load (lbs)	Rated Load (lbs)	Boom Angle (deg)	Rated Load (lbs)	Rated Load (lbs)	Boom Angle (deg)	Rated Load (lbs)	Radius (ft)	Boom Angle (deg)	Rated Load (lbs)	Rated Load (lbs)
8.5	58	44000	26500	71	26500	25400	76	25400	8.5	58	31000	26500
10	52	40000	31600	68	31600	28000	74	28000	10	52	24000	22300
12	44	33800	30500	64	30500	25000	72	25000	12	44	17200	16300
14	33	28500	28500	59	28500	22600	69	22600	14	33	13300	12500
16	0	24900	24900	55	25700	20000	66	20000	16	0	10200	9800
18	-	-	22800	50	22800	17900	63	17900	18	-	-	7900
20	-	-	20200	45	20200	16100	60	16100	20	-	-	6500
22	-	-	17800	39	17800	14600	56	14600	22	-	-	5300
24	-	-	15360	31	15360	13300	53	13300	24	-	-	4300
26	-	-	13250	22	13250	12300	49	12300	26	-	-	3500
27.5	-	-	11600	0	11600	11600	47	11600	27.5	-	-	2900
30	-	-	-	-	-	9900	42	10500	30	-	-	-
32	-	-	-	-	-	8800	37	9800	32	-	-	-
34	-	-	-	-	-	7800	32	8700	34	-	-	-
36	-	-	-	-	-	7100	26	7800	36	-	-	-

			MAIN BOOM LOAD RATINGS ON OUTRIGGERS Retracted and Down 360°											
		19.5 f	t Boom	20.5-30 ft Boom	31 ft	Boom	32-42 ft Boom	43 ft	43 ft Boom					
	Radius (ft)	Boom Angle (deg)	Rated Load (lbs)	Rated Load (lbs)	Boom Angle (deg)	Rated Load (lbs)	Rated Load (lbs)	Boom Angle (deg)	Rated Load (lbs)					
	8.5	58	31000	26500	71	26500	25400	76	25400					
	10	52	24000	22300	68	22300	22000	74	22000					
ı	12	44	17200	16300	64	16300	16300	72	17000					
ı	14	33	13300	12500	59	12500	12500	69	13600					
ı	16	0	10200	9800	55	9800	9800	66	11100					
ı	18	- 1	-	7900	50	7900	7900	63	9100					
ı	20	- 1	-	6500	45	6500	6500	60	7500					
ı	22	-	-	5300	39	5300	5300	56	6200					
ı	24	-	-	4300	31	4300	4300	53	5200					
ı	26	-	-	3500	22	3500	3500	49	4400					
	27.5	-	-	2900	0	2900	2900	47	3900					
	30	- 1	-	-	-	-	2600	42	3200					
	32	-	-	-	-	-	2300	37	2700					
	34	-	-	-	-	-	1900	32	2300					
	36	- 1	-	-	-	-	1750	26	1900					
	39.5	-	-	-	-	-	1400	0	1400					

	MAIN B ON RUI					
	Any Boom Length					
Radius (ft)	Front Rating (lbs)	360° Rating (lbs)				
6 8 10	30000 28000 25000	21000 17900 15000				
12 14	<b>19600</b> 15600	12400 9900				
16	12700	7700				
18	10300	6300				
20	8300	4900				
22	6800	3900				
24 26	5800 4900	3100 2500				
28	4200	2100				
30	3700	1800				
32	3300	1550				
34	3000	1300				
36	2700	1100				
38 40	2500 2200	950 800				

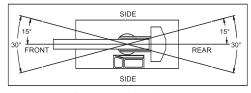
17 F	T JIB CAP. ON	EXT. OUTRIGO	SERS (lbs)		
Main		Jib Offset Angle			
Boom	0 deg	15 deg	30 deg		
Angle (deg)	Any Boom Length	Any Boom Length	Any Boom Length		
80	į	5000	3500		
75	7500	4400	3100		
70	6100	3900	2800		
65	5000	3500	2550 2350 2200		
60	4300	3150			
55	3800	2850			
50	3400	2600	2100		
45	3050	2400	2000		
40	2800	2250	1950		
35	2600	2150	1900		
30	2400	2080	1830		
25	2300	2050	-		
20	2200	2000	-		
15	2100	1950	-		
10	2050	-	-		
5	2020	-	-		
0	2000	-	-		

SHADED AREAS ARE GOVERNED BY STRUCTURAL STRENGTH, DO NOT RELY ON TIPPING.

OPERATION OF THIS EQUIPMENT IN EXCESS OF RATING CHARTS AND DISREGARD OF INSTRUCTIONS IS DANGEROUS AND VOIDS WARRANTY.

MAXIMUM PERMISSIBLE SINGLE LINE PULL = 11,000 lbs

HOIST ROPE: 5/8" diameter 6 x 19 XIPS IWRC BRIGHT Min. req'd breaking strength = 38,500 lbs



- The rated loads are the maximum lifting capacities as determined by operating radius, boom length, and boom angle.
   The operating radius is the horizontal distance from a projection of the axis of rotation to the supporting surface, before loading, to the center of vertical hoist line or tackle with load applied.
- Rated load columns for discrete boom lengths apply when actual boom length is within +/- 1.0 ft of discrete length. For other boom lengths, use appropriate intermediate boom length column.
- For operating radius not shown, use load rating of next larger radius.
- 4) The rated loads shown on outriggers do not exceed 85% of actual tipping. The rated loads shown on rubber do not exceed 75% of actual tipping. These ratings are based on freely suspended loads with the crane leveled, standing on a firm, uniform supporting surface. Practical working loads depend on supporting surface, operating radius and other factors affecting stability. Hazardous surroundings, climatic conditions, experience of personnel and proper handling must all be taken into account by the operator.

- 5) The weights of all load handling devices such as hooks,hook blocks, slings, etc., except the hoist rope, shall be considered as part of the load. See reduction chart.
- Ratings on outrigggers are for either outriggers fully extended and down or fully retracted and down. Ratings for outriggers fully retracted and down will apply for any intermediate outrigger setting.
- 7) Ratings on rubber depend on tire capacity, condition of tires and proper inflation pressure (110 psi). Loads on rubber may be transported at a maximum speed of 2.5 mph on a smooth hard level surface with boom retracted to the shortest length possible and centered over front. For 360° ratings on rubber, rear axle oscillation locks must be in place. Do not use jib with crane on rubber.
- 8) The maximum combined total boom and deck load is 20,000 lbs. The maximum deck load only is 30,000 lbs.
- 9) Do not induce any external side loads to boom or jib.

RATING RED HANDLING DE		
	FROM MAIN BOOM	FROM JIB
MAIN BLOCK	400	N/A
HOOK & BALL	100	100
JIB STOWED	0	N/A
JIB DEPLOYED	500	0

# range diagram

# YB7722 XL (5-section boom)

2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 **50** 52 54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 67.0 FT BOOM 4 55.0 FT BOOM Height from ground in feet 43.0 FT BOOM 31.0 FT BOOM **(** 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 **50** 52 54 56 58 60 62 64 66 68 70 72 74 76 78 80 82

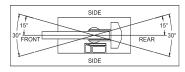
Operating radius in feet from axis of rotation

# load chart

# YB7722 XL (5-section boom)

						MAIN BOOM LO	AD DAT	INICS ON	OUTDICCEDS					
						ded and Down 3				Rear				
	19.5	ft Boom	20.5-30 ft Boom	31 ft	Boom	32-42 ft Boom	43 ft	Boom	44-54 ft Boom	55 ft	Boom	56-66 ft Boom	67 ft	Boom
Radius (ft)	Boom Angle (deg)	Rated Load (lbs)	Rated Load (lbs)	Boom Angle (deg)	Rated Load (lbs)	Rated Load (lbs)	Boom Angle (deg)	Rated Load (lbs)	Rated Load (lbs)	Boom Angle (deg)	Rated Load (lbs)	Rated Load (lbs)	Boom Angle (deg)	Rated Load (lbs)
8.5 10 12 14 16	58 52 44 33 0	44000 40000 33800 28500 23700	26500 26500 25300 22900 20900	71 68 64 59 55	26500 26500 24200 22900 20900	25400 25400 24200 22600 20000	76 74 72 69 66	25400 25400 24200 22600 20000	19500 19500 17600 16100 14800	79 78 76 74 71	19500 19500 17600 16100 14800	14500 13200 12200	- 78 77 75	14500 13200 12200
18 20 22 24 26	-	-	19300 17800 16400 14700 13200	50 45 39 31 22	19300 17800 16400 14700 13200	17900 16100 14600 13300 12300	63 60 56 53 49	17900 16100 14600 13300 12300	13700 12800 12000 11200 10600	69 67 64 62 60	13700 12800 12000 11200 10600	11200 10400 9700 9100 8600	73 71 69 67 66	11200 10400 9700 9100 8600
27.5 30 32	-	-	11600 - -	0 - -	11600 - -	11600 9900 8800	47 42 37	11600 10500 9800	10200 9400 8700	58 55 52	10200 9400 8700	8200 7700 7300	64 62 60	8200 7700 7300
34 36 38	:	-	-	-	-	7800 7100 6500	32 26 18	8700 7800 7000	8100 7600 7000	49 46 43	8100 7600 7100	6900 6600 6300	58 56 53	6900 6600 6300
39.5 42 44	-	-	-	-	-	6400	0	6400	6400 5700 5300	41 36 32	6800 6300 5800	6100 5800 5600	52 49 47	6100 5800 5600
46 48	-	-	-	-	-	-	-	-	4900 4600	28 23	5300 4800	5300 4800	44 42	5300 5000
50 51.5 54	-	-	-	-	-	-	-	-	4400 4000 -	16 0 -	4400 4000 -	4400 4000 3800	39 37 33	4700 4600 4200
56 58 60	-	-	-	-	-	-	-	-	-	-	-	3600 3400 3200	29 25 20	3900 3600 3300
62 63.5	-	-	-	-	-	-	-	-	-	-	-	3000 2800	14 0	3000 2800

RATING REDUCTIONS FOR LOAD HANDLING DEVICES INSTALLED (lbs)									
	FROM MAIN BOOM	FROM JIB							
		JID							
MAIN BLOCK	400	N/A							
HOOK & BALL	100	100							
JIB STOWED	0	N/A							
JIB DEPLOYED	500	0							



- The rated loads are the maximum lifting capacities as determined by operating radius, boom length, and boom angle. The operating radius is the horizontal distance from a projection of the axis of rotation to the supporting surface, before loading, to the center of vertical hoist line or tackle with load applied.
- Rated load columns for discrete boom lengths apply when actual boom length is within +/- 1.0 ft. of discrete length. For other boom lengths, use appropriate intermediate boom length column.
- 3) For operating radius not shown, use load rating of next larger
- 4) The rated loads shown on outriggers do not exceed 85% of actual tipping. The rated loads shown on rubber do not exceed 75% of actual tipping. These ratings are based on freely suspended loads with the crane leveled, standing on a firm, uniform supporting surface. Practical working loads depend on supporting surface, operating radius and other factors affecting stability. Hazardous surroundings, climatic conditions, experience of personnel and proper handling must all be taken into account by the operator.
- The weights of all load handling devices such as hooks, hook blocks, slings, etc., except for the hoist rope, shall be considered as part of the load. See reduction chart.
- Ratings on outriggers are for either outriggers fully extended and down or fully retracted and down. Ratings for outriggers fully retracted and down will apply for any intermediate outrigger setting.
- 7) Ratings on rubber depend on tire capacity, condition of tires and proper inflation pressure (110 psi). Loads on rubber may be transported at a maximum speed of 2.5 mph on a smooth hard level surface with boom retracted to the shorted length possible and centered over front. For 360' ratings on rubber, rear aute oscillation locks must be in place. Do not use jib with crane on rubber.
- The maximum combined total boom and deck load is 20,000 lbs. The maximum deck load only is 30,000 lbs.
- 9) Do not induce any external side loads to boom or jib.

			Retracted and Down 360°												
		19.5 f	t Boom	20.5-30 ft Boom	31 ft	Boom	32-42 ft Boom	43 ft	Boom	44-54 ft Boom	55 ft	Boom	56-66 ft Boom	67 ft	Boom
F	Radius (ft)	Boom Angle (deg)	Rated Load (lbs)	Rated Load (lbs)	Boom Angle (deg)	Rated Load (lbs)	Rated Load (lbs)	Boom Angle (deg)	Rated Load (lbs)	Rated Load (lbs)	Boom Angle (deg)	Rated Load (lbs)	Rated Load (lbs)	Boom Angle (deg)	Rated Load (lbs)
Γ	8.5	58	31000	26500	71	26500	25400	76	25400	19500	79	19500x	-	-	-
	10	52	24000	22300	68	22300	22000	74	22000	19500	78	19500	-	-	-
	12	44	17200	16300	64	16300	16300	72	17000	17000	76	17100	14500	78	14500
	14	33	13300	12500	59	12500	12500	69	13600	13600	74	14000	13200	77	13200
	16	0	10200	9800	55	9800	9800	66	11100	11100	71	11200	11200	75	11500
	18	-	-	7900	50	7900	7900	63	9100	9100	69	9300	9300	73	9400
	20	-	-	6500	45	6500	6500	60	7500	7500	67	7800	7700	71	7700
	22	-	-	5300	39	5300	5300	56	6200	6200	64	6600	6500	69	6500
	24	-	-	4300	31	4300	4300	53	5200	5200	62	5600	5600	67	5600
	26	-	-	3500	22	3500	3500	49	4400	4400	60	4800	4800	66	5000
	27.5	-	-	2900	0	2900	2900	47	3900	3900	58	4300	4300	64	4600
	30	-	-	-	-	-	2600	42	3200	3200	55	3600	3600	62	3900
	32	-	-	-	-	-	2300	37	2700	2700	52	3100	3100	60	3400
	34	-	-	-	-	-	1900	32	2300	2300	49	2700	2700	58	2900
	36	-	-	-	-	-	1750	26	1900	1900	46	2300	2300	56	2500
	38	-	-	-	-	-	1500	18	1600	1600	43	2000	2000	53	2100
	39.5	-	-	-	-	-	1400	0	1400	1400	41	1750	1750	52	1850
	42	-	-	-	-	-	-	-	-	1150	36	1450	1450	49	1500
	44	-	-	-	-	-	-	-	-	1000	32	1200	1200	47	1300
	46	-	-	-	-	-	-	- 1	-	850	28	1000	1000	44	1100
s	48	-	-	-	-	-	-	-	-	750	23	850	850	42	950
1	50	-	-	-	-	-	-	- 1	-	650	16	700	700	39	800
	51.5	-	-	-	-	-	-	- 1	-	600	0	600	600	37	700
	54	-	-	-	-	-	-	-	-	-	-	-	450	33	500
	56	-	-	-	-	-	-	-	-	-	-	-	350	29	350
	58	-	-	-	-	-	-	-	-	-	-	-	250	25	250
	60	-	-	-	-	-	-	-	-	-	-	-	150	20	150
	62	-	-	-	-	-	-	-	-	-	-	-	50	14	50
	63.5	-	-	-	-	-	-	-	-	-	-	-	-	0	-

MAIN BOOM LOAD DATINGS ON OUTDIGGEDS

	MAIN BOOM ON RUBBER					
	Any Boo	m Length				
Radius (ft)	Front Rating (lbs)	360° Rating (lbs)				
6 8 10 12	30000 28000 25000 19600	21000 17900 15000 12400				
14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54	15500 12400 9900 8100 6800 5700 4900 4200 3700 2500 2500 2200 1800 1650 1400 1300 1150	9500 7400 6000 4600 3700 2350 2100 1800 1550 1300 950 800 675 550 450 250 250 250				
56 58 60 62 63.5	950 875 800 700 600	75 25 - - -				

SHADED AREAS ARE GOVERNED BY STRUCTURAL STRENGTH,
DO NOT RELY ON TIPPING.
OPERATION OF THIS EQUIPMENT IN EXCESS OF RATING

AND VOIDS WARRANTY.

MAXIMUM PERMISSIBLE SINGLE LINE PULL = 11,000 lbs

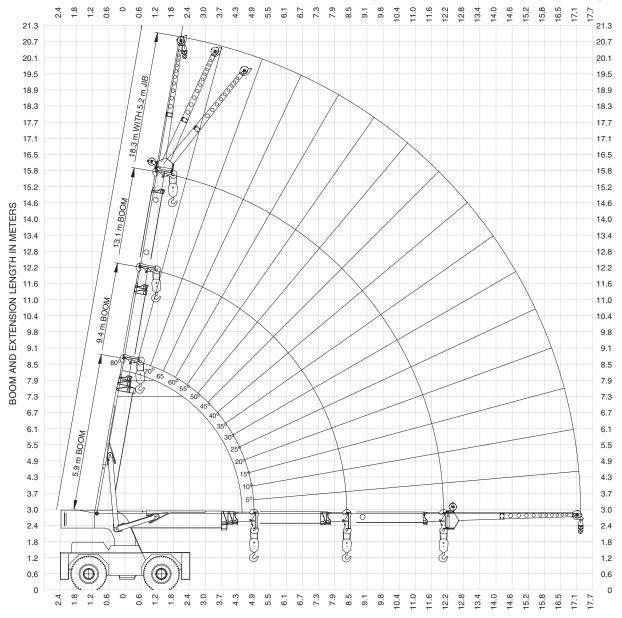
WIRE ROPE: 5/8 inch dia. 6 x 19 XIPS IWRC BRIGHT Min. req'd breaking strength = 38,500 lbs

	47 FT UD (	CAPACITIES C	AL EVEENDED	OUTDIOOED	_				
	17 FT JIB C				5				
Main			Jib Offset Angle 15 deg 30 deg						
Boom	0	deg	15	15 deg					
Angle	To 55.0 ft	To 67.0 ft	To 55.0 ft	To 67.0 ft	Any				
(deg)	Main	Main	Main	Main	Boom				
	Boom	Boom	Boom	Boom	Length				
80	-	-	5000	5000	3500				
75	7500	-	4400	4400	3100				
70	6100	-	3900	3900 3500	2800				
65	5000	4600	3500	2550					
60	4300	3800	3150	2350					
55	3800	3300	2850	2200					
50	3400	2900	2600	2600	2100				
45	3050	2600	2400	2400	2000				
40	2800	2400	2250	2250	1950				
35	2600	2150	2150	2050	1900				
30	2400	1930	2080	1850	1830				
25	2300	1750	2050	1720	-				
20	2200	1600	2000	1590	-				
15	2100	1500	1950	1520	-				
10	2050	1460	-		-				
5	2020	1450	-		-				
	2000	1440	-	-	-				

# range diagram

# YB7722 (3-section boom)





OPERATING RADIUS IN METERS FROM AXIS OF ROTATION

# DIN/ISO load chart

# YB7722 (3-section boom)

		MAIN BOOM LOAD RATINGS ON OUTRIGGERS  Extended and Down 360° or Retracted and Down Front/Rear  5.9 m Boom												
	5.9 m	Boom	6.2-9.1 m Boom	9.4 m	Boom	13.1 m Boom								
Radius (m)	Boom Angle (deg)	Rated Load (kg)	Rated Load (kg)	Boom Angle (deg)	Rated Load (kg)	Rated Load (kg)	Boom Angle (deg)	Rated Load (kg)						
2.6 3.0	58 52	19960 18140	14330 14330	71 68	14330 14330	12700 12700	76 74	12700 12700						
3.7 4.3	44 33	15350 12930	13830 12930	64 59	13830 12930	11340 10270	72 69	11340 10270						
4.9 5.5 6.1	-	10740	10740 10340 8900	55 50 45	11660 10340 8900	9090 8110 7300	66 63 60	9090 8110 7300						
6.7	-	-	7710 6550	39 31	7710 6550	6620 6050	56 53	6620 6050						
7.9 8.4	-	-	5520 4790	22	5520 4790	5520 4790	49 47	<b>5560</b> 5150						
9.1 9.8	-	-	-	-	-	4050 3580	42 37	4630 4050						
10.4 11.0	-	-	-	-	-	3160 2880	32 26	3560 3180						
12.0	-	-	-	-	-	2580	0	2580						

	MAIN BOOM LOAD RATINGS ON OUTRIGGERS Retracted and Down 360°												
	5.9 m	9.7-12.8 m Boom	13.1 m	Boom									
Radius (m)	Boom Angle (deg)	Rated Load (kg)	Rated Load (kg)	Boom Angle (deg)	Rated Load (kg)	Rated Load (kg)	Boom Angle (deg)	Rated Load (kg)					
2.6	58	13070	13070	71	13270	12700	76	12700					
3.0	52	10110	9360	68	9360	9020	74	9020					
3.7	44	7190	6800	64	6800	6800	72	7100					
4.3	33	5520	5210	59	5210	5210	69	5630					
4.9	0	4230	4050	55	4050	4050	66	4630					
5.5	-	-	3210	50	3210	3210	63	3730					
6.1	-	-	2620	45	2620	2620	60	3060					
6.7	-	-	2100	39	2100	2100	56	2490					
7.3	-	-	1710	31	1710	1710	53	2060					
7.9	-	-	1340	22	1340	1340	49	1720					
8.4	-	-	1080	0	1080	1080	47	1510					
9.1	-	-	-	-	-	950	42	1200					
9.8	-	-	-	-	-	820	37	1000					
10.4	-	-	-	-	-	670	32	820					
11.0	-	-	-	-	-	590	26	660					
12.0	-	-	-	-	-	450	0	450					

	ON RUBBER							
	Any Boom Length							
Radius (m)	Front Rating (kg)	360° Rating (kg)						
1.8	13610	9520						
2.4	12700	8120						
3.0	11340	6800						
3.7	<b>8890</b>	5470						
4.3	6990	4340						
4.9	5570	3320						
5.5	4520	2680						
6.1	3620	2070						
6.7	2940	1620						
7.3 7.9	2480	1260 980						
8.5	1760 1530	810 670						
9.1 9.8	1350	550						
10.4	1210	440						
11.0	1080	350						
11.6	960	280						
12.0	900	210						

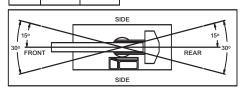
MAIN BOOM

SHADED AREAS ARE GOVERNED BY STRUCTURAL STRENGTH, DO NOT RELY ON TIPPING.

**OPERATION OF THIS EQUIPMENT IN EXCESS** OF RATING CHARTS AND DISREGARD OF INSTRUCTIONS IS DANGEROUS AND VOIDS WARRANTY.

MAXIMUM PERMISSIBLE SINGLE LINE PULL = 4990 kg

WIRE ROPE: 16 mm dia. 6 x 19 XXIPS IWRC BRIGHT Min. req'd breaking strength = 188.4 kN



RATING REDUCTIONS FOR LOAD								
HANDLING DEVICES INSTALLED (kg)								
	FROM MAIN BOOM	FROM JIB						
MAIN BLOCK	180	N/A						
HOOK & BALL	50	50						
JIB STOWED	0	N/A						
JIB DEPLOYED	230	0						

5.2 ו	m JIB CAP. ON E	XT. OUTRIGGER	RS (kg)						
Main	Jib Offset Angle								
Main Boom	0 deg	15 deg	30 deg						
Angle (deg)	Any Boom Length	Any Boom Length	Any Boom Length						
80	-	2270	1590						
75	3400	2000	1410						
70	2770	1770	1270						
65	2270	1590	1160						
60	1950	1430	1070						
55	1720	1290	1000						
50	1540	1180	950						
45	1380	1090	910						
40	1270	1020	880						
35	1180	980	860						
30	1090	940	830						
25	1040	930	-						
20	1000	910	-						
15	950	880	-						
10	930	-	-						
5	920	-	-						
0	910	-	-						

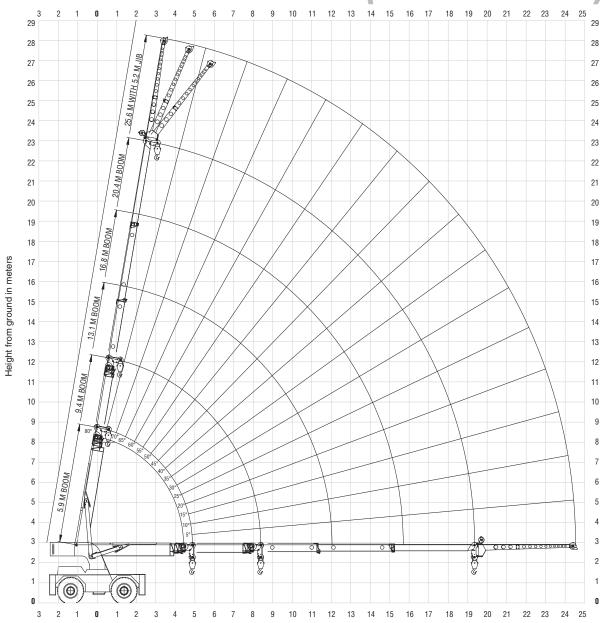
- 1) The rated loads are the maximum lifting capacities as determined by operating radius, boom length, and boom angle. The operating radius is the horizontal distancefrom a projection of the axis of rotation to the supporting surface, before loading, to the center of vertical hoist line or tackle with load applied
- 2) Rated load columns for discrete boom lengths apply when actual boom length is within +/- 0.3 m of discrete length. For other boom lengths, use appropriate intermediate boom length column
- 3) For operating radius not shown, use load rating of next larger radius.
- The rated loads shown on outriggers do not exceed 80% of actual tipping. The rated loads shown on rubber do not exceed 75% of actual tipping. These ratings are based on freely suspended loads with the crane leveled, standing on a firm, uniform supporting surface. Practical working loads depend on supporting surface, operating radius and other factors affecting stability. Hazardous surroundings, climatic conditions, experience of personnel and proper handling must all be taken into account by the operator.
- The weights of all load handling devices such as hooks, hook blocks, slings, etc., except the hoist rope, shall be considered as part of the load. See reduction chart.
- Ratings on outrigggers are for either outriggers fully extended and down or fully retracted and down. Ratings for outriggers fully retracted and down will apply for any intermediate outrigger
- 7) Ratings on rubber depend on tire capacity, condition of tires and proper inflation pressure (7.6 bar). Loads on rubber may be transported at a maximum speed of 1.4 km/h on a smooth hard level surface with boom retracted to the shortest length possible and centered over front. For 360∞ ratings on rubber, rear axle oscillation locks must be in place. Do not use jib with
- The maximum combined total boom and deck load is 9070 kg. The maximum deck load only is 13610 kg.
- Do not induce any external side loads to boom or jib.

YB7700 Series

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# range diagram

# YB7722XL (5-section boom)



Operating radius in meters from axis of rotation

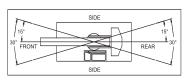
# DIN/ISO load chart

# YB7722XL (5-section boom)

	MAIN BOOM LOAD RATINGS ON OUTRIGGERS													
					1	Extended and Down	360° or F	Retracted ar	nd Down Front/Rear					
	5.9 n	n Boom	6.2-9.1 m Boom	9.4 n	1 Boom	9.7-12.8m Boom	13.1	n Boom	13.4-16.5m Boom	16.8 r	n Boom	17.1-20.1m Boom	20.4 m Boom	
Radius (m)	Boom Angle (deg)	Rated Load (kg)	Rated Load (kg)	Boom Angle (deg)	Rated Load (kg)	Rated Load (kg)	Boom Angle (deg)	Rated Load (kg)	Rated Load (kg)	Boom Angle (deg)	Rated Load (kg)	Rated Load (kg)	Boom Angle (deg)	Rated Load (kg)
(m) 2.6 3.0 3.7 4.3 4.9 5.5 6.1 6.7 7.3 7.9 8.4 9.1 9.8 10.4 11.0 11.6 12.0	(deg) 58 52 44 33 0	(kg) 19960 18140 15330 12930 10750	(kg) 12020 12020 12020 11480 10390 9480 8750 7940 7440 6550 5520 4790	(deg) 71 68 64 59 55 50 45 39 31 22 0	(kg) 12020 12020 11020 11480 10390 9480 8750 7940 7440 6550 5520 4790	(kg) 11520 11520 11520 10980 10250 9070 8120 7300 6620 6330 5520 4790 4050 3580 3160 2880 2600 2580	(deg)  76  74  72  69  66  63  60  56  53  49  47  42  37  32  26  18	(kg) 11520 11520 11520 10980 10250 9070 8120 7300 6620 6030 5580 5150 4630 4050 3560 3180 2830 2580	(kg)  8850  8850  7980  6710  6210  5810  5440  5080  4250  4260  3950  3180  2830  2580	(deg) 79 78 76 74 71 69 67 64 62 60 58 55 52 49 46 43 41	(kg)  8850 8850 7980 6710 6210 5810 5440 5080 4810 4630 4260 3950 3670 3450 3180	(kg)	(deg)	(kg) 
12.8	-	-	-	-	-	-	-	-	2280	36	2540	2540	49	2630
13.4	-		-	-	-	-	-	-	2120	32	2320	2320	47	2470
14.0 14.6	:	1 :	-		-	-	-		1960 1810	28 23	2110 1910	2110 1910	44 42	2260 2070
15.2	-	1							1710	16	1720	1720	39	1920
15.7	-	-	-	-	-	-	-	-	1550	0	1550	1550	37	1810
16.5	-	-	-	-	-	-	-	-	-	-	-	1470	33	1640
17.1	-	-	-	-	-	-	-	-	-	-	-	1400 1290	29	1510 1380
17.7 18.3	-	1	-			-	-	-	-	- 1		1290 1220	25 20	1380
19.4	-	-	-	-	-	-	-	-	-	-	-	1040	0	1040

	MAIN BOOM						
	ON RUBBER						
	Any Boom Length						
_	Front 360°						
Radius	Rating	Rating					
(m)	(kg)	(kg)					
1.8	13610	9530					
2.4	12700	8120					
3.0	11340	6800					
3.7	8890	5200					
4.3	6750	4040					
4.9	5460	3140					
5.5	4250	2550					
6.1	3520	1950					
6.7	2920	1520					
7.3	2450	1170					
7.9	2050	930					
8.5	1760	810					
9.1	1530	670					
9.8	1350	550					
10.4	1210	440					
11.0	1080	350					
11.6	960	280					
12.2	850	210					
12.8	760	160					
13.4	660	100					
14.0	570	50					
14.6	500	10					
15.2	440	-					
15.8	370	-					
16.5	330	-					
17.1	280	-					
17.7	240	-					
18.3	200	-					
18.9	170	-					
19.4	130	-					

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RATING REDUCTIONS FOR LOAD								
HANDLING DEVICES INSTALLED (kg)								
	FROM MAIN BOOM	FROM JIB						
MAIN BLOCK	180	N/A						
HOOK & BALL	50	50						
JIB STOWED	0	N/A						
JIB DEPLOYED	230	0						

	Retracted and Down 360°													
	5.9 n	n Boom	6.2-9.1 m Boom	9.4 n	n Boom	9.7-12.8m Boom	13.1 r	n Boom	13.4-16.5m Boom	16.8 m Boom 17.1-20.1m Boo			20.4 m Boom	
Radius (m)	Boom Angle (deg)	Rated Load (kg)	Rated Load (kg)	Boom Angle (deg)	Rated Load (kg)	Rated Load (kg)	Boom Angle (deg)	Rated Load (kg)	Rated Load (kg)	Boom Angle (deg)	Rated Load (kg)	Rated Load (kg)	Boom Angle (deg)	Rated Load (kg)
2.6	58	13070	12020	71	12020	11520	76	11520	8850	79	8850	-		-
3.0	52	10110	9360	68	9360	9020	74	9020	8850	78	8850		-	-
3.7	44	7190	6800	64	6800	6800	72	7100	7100	76	7130	6580	78	6580
4.3	33	5520	5210	59	5210	5210	69	5630	5630	74	5810	5610	77	5610
4.9	0	4230	4050	55	4050	4050	66	4630	4630	71	4630	4630	75	4720
5.5	-		3210	50	3210	3210	63	3730	3730	69	3810	3810	73	3850
6.1	-		2620	45	2620	2620	60	3060	3060	67	3170	3130	71	3130
6.7	-		2100	39	2100	2100	56	2490	2490	64	2660	2620	69	2620
7.3	-		1710	31	1710	1710	53	2060	2060	62	2230	2230	67	2240
7.9	-	-	1340	22	1340	1340	49	1720	1720	60	1890	1890	66	1970
8.4	-		1080	0	1080	1080	47	1510	1510	58	1680	1680	64	1780
9.1	-	-	-	-		950	42	1200	1200	55	1380	1380	62	1500
9.8	-	-	-	-	-	820	37	1000	1000	52	1160	1160	60	1290
10.4	-		-	- 1	-	670	32	820	820	49	990	990	58	1090
11.0	-	-	-	-		590	26	660	660	46	830	830	56	910
11.6	-		-	- 1		490	18	530	530	43	690	690	53	740
12.0	-	-		- 1		450	0	450	450	41	590	590	52	630
12.8	-	-	-	-		-	-	-	330	36	460	460	49	490
13.4	-		-	-	-	-	-	-	280	32	360	360	47	400
14.0	-	-	-	- 1	-	-	- 1	-	220	28	270	270	44	320
14.6	-		-	- 1	-	-	-	-	170	23	200	200	42	250
15.2	-	-	-	-	-	-	-	-	120	16	140	140	39	180
15.7	-	-	-	-	-	-	-	-	100	0	100	100	37	130
16.5	-	-	-	-	-	-	-	-	-	-	-	30	33	50
17.1	-	-	-	- 1		-	-		-	-			29	-
17.7	-	-	-	-	-	-	-	-	-	-	-	-	25	-
18.3	-	-	-	-		-	-	-	-	-	-	-	20	-
19.4	-		-	-	-	-	-	-	-	-	-	-	0	-

MAIN BOOM LOAD RATINGS ON OUTRIGGERS

- The rated loads are the maximum lifting capacities as determined by operating rduis, boom length, and boom angle. The operating radius is the horizontal distance from a projection of the axis of rotation to the supporting surface, before loading, to the center of vertical hoist line or tackle with load applied.
- Rated load columns for discrete boom lengths apply when actual boom length is within +/- 0.3 m. of discrete length. For other boom lengths, use appropriate intermediate boom length column.
- For operating radius not shown, use load rating of next larger radius.
- 4) The rated loads shown on outriggers do not exceed 80% of actual tipping. The rated loads shown on rubber do not exceed 75% of actual tipping. These ratings are based on freely suspended loads with the crane leveled, standing on a firm, uniform supporting surface, Practical working loads depend on supporting surface, operating radius and other factors affecting stability. Hazardous surroundings, climatic conditions, experience of personnel and proper handling must all be taken into account by the operator.
- The weights of all load handling devices such as hooks, hook blocks slings, etc., except for the hoist rope, shall be considered as part of the load. See reduction chart.
- Ratings on outriggers are for either outriggers fully extended and down or fully retracted and down. Ratings for outriggers fully retracted and down will apply for any intermediate outrigger setting.
- 7) Ratings on rubber depend on tire capacity, condition of tires and proper inflation pressure (7.6 bar), Loads on rubber may be transported at a maximum speed of 1.4 km/h on a smooth hard level surface with boom retracted to the shorted length possible and centered over front. For 360° ratings on rubber, rear axle oscillation locks must be in place. Do not use jib with crane on rubber.
- 8) The maximum combined total boom and deck load is 9070 kg. The maximum deck load only is 13610 kg.
- 9) Do not induce any external side loads to boom or jib.

SHADED AREAS ARE GOVERNED BY STRUCTURAL STRENGTH,

OPERATION OF THIS EQUIPMENT IN EXCESS OF RATING CHARTS AND DISREGARD OF INSTRUCTIONS IS DANGEROUS AND VOIDS WARRANTY.

MAXIMUM PERMISSIBLE SINGLE LINE PULL = 4990 kg

WIRE ROPE: 16 mm dia. 6 x 19 XXIPS IWRC BRIGHT Min. req'd breaking strength = 188.4 kN

	5.2 m JIB	CAPACITIES ON	EXTENDED OUT	FRIGGERS (kg)							
Main	Jib Offset Angle										
Boom	0	deg	15	deg	30 deg						
Angle (deg)	To 16.8 m Main Boom	To 20.4 m Main Boom	To 16.8 m Main Boom	To 20.4 m Main Boom	Any Boom Length						
80	-	-	2270	2270	1590						
75	3400	-	2000	2000	1410						
70	2770	-	1770	1770	1270						
65	2270	2090	1590	1590	1160						
60	1950	1720	1430	1430	1070						
55	1720	1500	1290	1290	1000						
50	1540	1320	1180	1180	950						
45	1380	1180	1090	1090	910						
40	1270	1090	1020	1020	880						
35	1180	980	980	930	860						
30	1090	880	940	840	830						
25	1040	790	930	780	-						
20	1000	730	910	720	-						
15	950	680	880	690	-						
10	930	660	-	-	-						
5	920	660	-	-	-						
0	910	650	-	-	-						

# notes

**15** 



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Constant improvement and engineering progress make it necessary that we reserve the right to make specification, equipment and price changes without notice. Illustrations shown may include optional equipment and accessories, and may not include all standard equipment.

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