

Grove Manitowoc National Crane Potain



Grove YB4400 Series

Product Guide



- YB4409: 7,7 t (8.5 USt) three-section boom
- YB4409XL: 7,7 t (8.5 USt) three-section boom with 10,2 m (33 ft 6 in) tip height
- YB4409-2: 8,1 t (9 USt) three-section boom
- YB4411: 9,5 t (10.5 USt) three-section boom with 11,6 m (38 ft 2 in) tip height
- 1,8 m (6 ft) fixed extension (YB4409/XL) and 3,6 m (12 ft) offsettable swingaway extension (YB4409-2 and YB4411)
- 63,4 kW (85 bhp) Cummins diesel engine or 59,6 kW (80 bhp) GM EFI dual fuel engine



Features



Boom Standardı

6,4m (21 ft) main boom on the YB4409. 9,1m (30 ft) main boom on the YB4409XL. 10, 0 m (32 ft 10 in) main boom on the YB4409-2 and YB4411.

Optional Manual fourth main boom section adds 3,0 m (10 ft) additional main boom length on YB4409 and YB4409-XL only.



Engine Standardı Cummins QSB 3.3 L turbo-charged diesel rated at 63,4 kW (85 bhp) at 2600 rpm.



Standard on the YB4409-2 and YB4411 the exclusive pivoting boom nose allows operators to decrease the overall boom head depth and operate in more confined areas.



Standard: Open air cab shell with overhead safety glass Optional: Closed cab with hinged door, heater/ defroster, and all window glass



Steering

Standardı four-wheel coordinated steer Standardı two-wheel, four-wheel, and crab steer with self alignment (YB4411) Optional: two-wheel, four-wheel, and crab steer (standard on YB4409-2)



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Specifications

Superstructure



MI Boom

YB4409: 2,9 m - 6,5 m (9 ft 8 in - 21 ft 2 in) threesection full power boom. Maximum tip height: 7,6 m (25 ft 2 in)

YB4409XL1 3,8 m - 9,2 m (12 ft 8 in - 30 ft 2 in) three- section full power boom. Maximum tip height: 10,2 m (33 ft 6 in)

YB4409-2 and YB4411: 4,2 m - 10,0 m (13 ft 10 in - 32 ft 10 in) three-section full power boom. Maximum tip height: 11,6 m (38 ft 2 in)



Optional boom

YB4409 and YB4409XL: Manual fourth main boom fly section adds 3,0 m (10 ft) additional boom length.



🌮 °Boom extension

YB4409 and YB4409XL: 1,8 m (6 ft) fixed pin on extension

YB4409-2 and YB4411: 3,6 m (12 ft) offsettable 3,6 m - 5,4 m (12 ft- 18 ft) telescopic

offsettable extension



Boom nose

YB4409 / XL: Single sheave non-pivoting

YB4409-2 and YB4411: Single sheave, three-position (0", + 30°, + 80") pivoting boom nose for minimizing head space requirements. Lowers head height. 0,26 m (10.5 in) when nose is pivoted fully forward.



Boom elevation

Single double acting hydraulic cylinder with integral holding valve.

Elevation: 0° to 60' for the YB4409 and YB4409XL 0° to 72° for the YB4409-2 and YB4411



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 (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. (witeless system)



Rated Capacity Limiter (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.

(witeless system)



°Load Moment Indicator (LMI)

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

(hardwited system)



Swing

Ball bearing swing circle with 360° continuous

Hydraulic driven worm gear and pinion. Maximum speed: 2.05 rpm



Hydraulic system

YB4409 and 4409XL: (2) gear pumps YB4409-2 and YB4411: Variable displacement piston pump and piggyback gear pump. Combined flow: 107,9Lpm (28.5 gpm)

Maximum system operating pressure: 3600 psi

YB4409 and YB4409XL: Six section valve bank mounted in dash panel with direct mechanical linkage for low effort lever control.

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*Denotes optional equipment



Specifications

Superstructure continued

YB4409-2 and YB4411: 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.

89 L (23.5 gal) hydraulic reservoir with sight level gauge and steel side plating to guard against side impact damage.



Hoist specifications

YB4409 / XL: Worm drive with counter-balance valving. Equal speed power up and down.

YB4409-2 and YB4411: Piston motor drive with spring applied/hydraulic released brake.

Drum Diameter:

YB4409 / XL: 0,24 m (9.69 in) YB4409-2 and YB4411: 0,27 m (10.63 in)

Maximum Single Line Pull: YB4409 / XL: 4854 kg (10,700 lb) YB4409-2 and YB4411: 6350 kg (14,000 lb)

Maximum Single Line Speed:

YB4409 / XL: 26,8 m/min (88 fpm) YB4409-2 and YB4411: 36,6 m/min (120 fpm)

Maximum Permissible Single Line Pull: YB4409 / XL: 3855 kg (8,500 lb) (12,7mm [1/2 inch] Python Ultra XIPS) YB4409-2 and YB4411: 4536 kg (10,000 lb) (14,0mm [9/16 inch] EEIPS)

Rope Length:

YB4409 / XL: (three-section boom) 29,6 m (97 ft) (four-section boom) 39,6 m (130 ft)

YB4409-2 and YB4411: 36,6 m (120 ft)

Carrier



Frame

Grove YB4400 Series

High strength alloy steel constructed with integral outrigger housings; front and rear lifting, towing, and tie-down lugs. 42 ft.2 carrydeck size with 6350 kg (14,000 lb) carrying capacity (YB4409 / XL / YB4409-2) and 7711kg (17,000 lb) carrying capacity (YB4411). Deck coated with anti-skid treatment.



Outriggers

YB4409, YB4409XL and YB4409-2: Front and rear oblique type beams at all four corners with integral holding valves. Outrigger pads form an integral part of the beam.

YB4411: Hydraulic telescoping beam with oblique type jack provides extended and down and retracted and down lifting capacities. Integral holding valves on both beam and jack.

Padsize YB4400 Series: 18 cm x 20 cm (7.4 in x 7.8

Maximum outrigger pad load: YB4409/XL: 122 psi YB4411: 387 psi



Outrigger controls

YB4409-2, YB4409 and YB4409XL: Lever controls located on dash panel which operate the beams in pairs from side to side.

YB4411: Two switch operation mounted on dash panel. One -three- position rocker switch to select all beams/jacks, left beams/jacks only, or right beams/ jacks only. Separate -four- way toggle switch to activate beams out/in and jacks down/up. Level bubble indicator located inside operators compartment. *Independent outrigger controls available as an option.



Standard engine (Tier III)

Cummins QSB 3.3 L turbo-charged diesel rated @ 63,4 kW (85 bhp) @ 2600 rpm. Supplied with 110 V engine block heater and air intake grid heater.



Optional engine

G.M. 3.0 L EFI dual fuel (gasoline / L.P.) rated @ 59,6 kW (80 bhp) @ 2600 rpm.



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 include 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 and provides warning for A2B and exceeded load capacity.

*Denotes optional equipment

(909) 222-0202



Specifications



Operators control station enclosed

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

Front windshield wiper and heater and defroster is included.



Fuel tank capacity

70 L (18.5 gallon) all steel construction with steel side plate to guard against side impact.



Electrical system

One 12V maintenance free battery, 820CCA @ 0'. Jump start connections 63 amp alternator.



4 x 2 – Front axle drive with planetary hubs and limited slip Differential.



Steer

YB4409 / XL: two-wheel, four-wheel steer YB4409-2: two-wheel, four-wheel with crab steer YB4411: two-wheel, four-wheel, and crab steer with electronic self alignment.

Outside turning radius: YB4409 / XL / YB4409-2: Two w/s: 4,47 m (14 ft 8 in) Four w/s: 3,10 m (10 ft 2 in) YB44111 Two w/s: 4,88 m (16 ft) Four w/s: 3,17 m (10 ft 5 in)



Transmission

YB4409 / XL and YB4409-2: Synchromesh

-four- speeds forward and reverse with stalk mounted forward/reverse selector.

YB4411: Powershift -four- speeds forward and reverse. Stalk mounted shifter on left side of steering column.



Axles

Front: Carraro planetary drive/steer with internal multi-wet-disc brakes and limited slip differential. Rear: Fabricated non-drive steer with disc brakes



Tires

10.00 x 15 14PR pneumatic



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: Rigid mounted to frame



Lights

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



Maximum speed

35,6 km/h (22 mph)



Gradeability (theoretical)

YB4409 / XL and YB4409-2: 57%....no load 31%.... 5443 kg (12,000 lb) load

YB4411: 68%....no load 40%.... 9072 kg (20,000 lb) load

Gross vehicle weight

YB4409: 6142 kg (13,540 lb) YB4409XL: 7248 kg (15,980 lb) YB4409-2: 7403 kg (16,320 lb) YB4411: 7656 kg (16,880 lb)

Miscellandous standard equipment

Single sheave, "Quick Reeve" style hookblock.; YB4409 / XL: 8,0 t (8.5 USt) YB4409-2: 8,1 t (9USt) YB4411: 10 t (10.5 USt) Back-up alarm

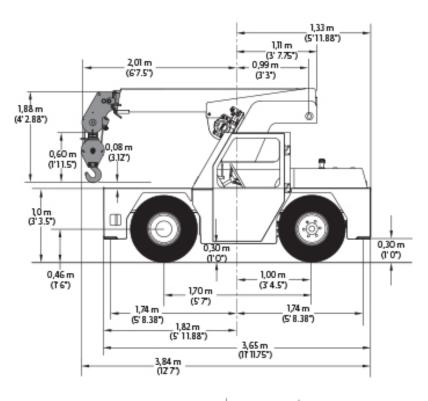
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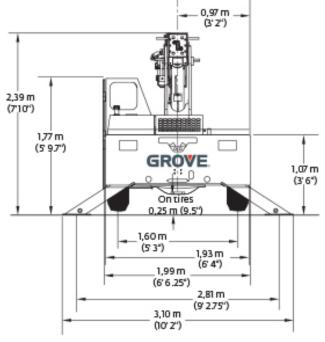
*Denotes optional equipment



Dimensions

YB4409



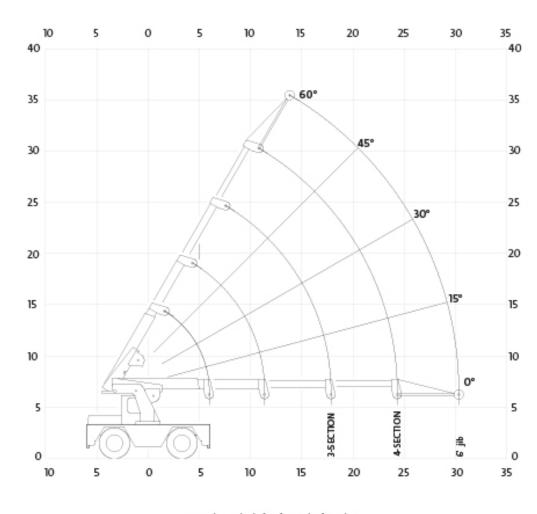


Grove YB4400 Series



Range diagram

YB4409



Operating radius in feet from axis of rotation

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Boom and extension length in feet



Load chart

YB4409

RADIUS		3-SECTION BOOM OR 4-SECTION BOOM WITH 4TH RETRACTED				RADIUS	4-SECT	ION BOOM W	TH 4TH EXT	ENDED
(ft)		(CGERS(Ib)	ON RUI	88ER()b)		(ft)	ON OUTR	IGGERS (Ib)	ONRU	BBER (Ib)
	FR.	360°	E/R	350°			F/R	360°	PR.	360°
5.0	• 17,000	• 17,000	10,000	10,000	2	5.0	6100	6100	6900	6100
6.0	15,700	* 14,400	10,000	7450	8	6.0	6100	6100	6900	6100
8.0	12,400	10,800	7150	4400		8.0	5100	5300	5300	5250
10.0	10,200	8600	4700	2950	15	10.0	4700	4700	4700	2750
12.0	8500	7000	3430	20'5	≤	12.0	4400	4400	3800	3450
14.0	7200	5400	2650	700		14.0	4400	4400	2900	1975
16.0	6100	4300	2150	10.25	ı	16.0	4400	4400	2325	1525
18.0	5000	3550	775	1000	1	18.0	4400	4100	1900	1225
20.0	2700	2700	1525	950	N.	20.0	4300	3150	1600	1000
22.0	2600	3500	1050	825	IΝ	22.0	2700	2700	1175	850
24.5	2200	2300	190	675	I١	24.5	3100	2100	1200	700
26.0	-			- 1	l	26.0	2700	2125	100	650
28.0					l≘	25.0	2500	1900	975	575
30.0		- 1		-	17	30.0	2300	17'00	850	45
31.0	-			- 1	I	31.0	2200	1625	800	425

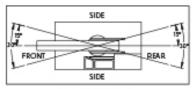
MAIN	JIB STRUCTURAL	CAPACITIES (lb)
BOOM ANGLE (dag)	3-SECTION BOOM OR 4-SECTION BOOM WITH 4TH RETRACTED	4-SECTION BOOM WITH 4TH EXTENDED
60	3500	3500
55	3325	3325
50	3150	3150
45	3000	3000
40	2875	2875
35	2800	2800
30	2700	2700
25	2600	2600
20	2500	2500
15	2400	2400
10	2325	2325
5	2250	2250
0	2200	2200

NOTES:

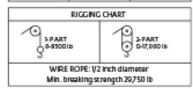
JIB CAPACITY IS LIMITED BY BOTH STRUCTURAL CAPACITY CHART AND MAIN CAPACITY CHART.

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.



REDUCTION CHART					
FROM FROM JIB RATINGS RATINGS					
MAIN BLOCK	140 lb	N/A			
HOOK & BALL	100 lb	100 lb			
JIB, STOWED	0 lb	N/A			
JIB, DEPLOYED	150 lb	0 lb			



Grove YB4400 Series

- The rated loads are the maximum lift capacities as determined by operating radius, boom extension 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.
- 2) 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 training must all be taken into account by the operator.
- The weights of all load handling devices such as hooks, hookblocks, slings, etc., except the hoist rope, shall be considered part of the load.
 See reduction chart.

- 4) 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.
- 5) Ratings on rubber depend on tire capacity, condition of tires and proper inflation pressure (100 psi). Loads on rubber may be transported at a maximum seed of 2.5 mph on a smooth bard level surfacewith

smooth, hard, level surface with boom retracted to the shortest length possible and centered over front.

- For operating radius not shown, use load rating of next larger radius.
- The maximum combined total boom and deck load is 12,000 lb. The maximum deck load only is 14,000 lb.
- Do not induce any external side loads to boom or jib.

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THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.

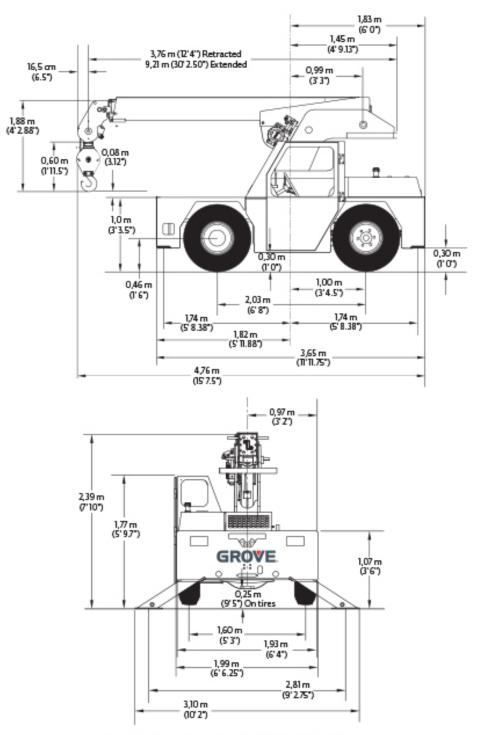
The individual cranic load chars, operating instructions and other instructional place must be read and understood prior to operating the crans.

^{*} LIMIT RATINGS TO 11.800 LB WHEN 3RD SECTION IS EXTENDED ANY AMOUNT.



Dimensions

YB4409XL



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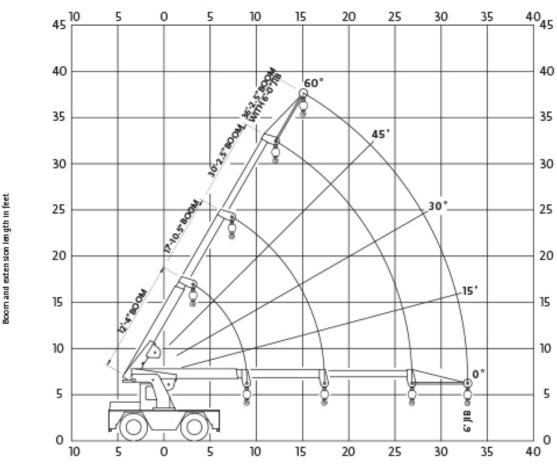
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Range diagram

YB4409XL (with three-section boom)



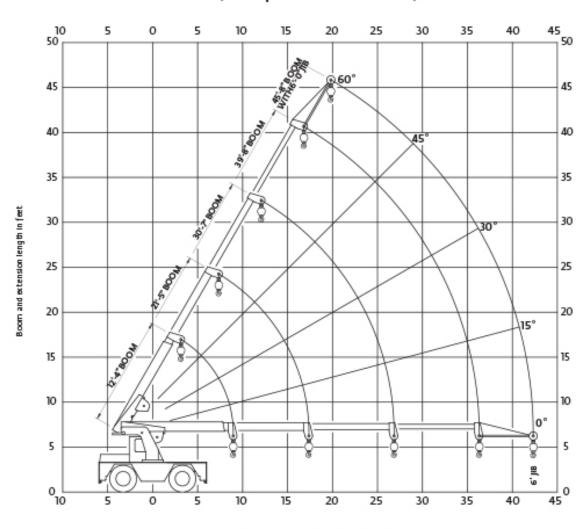
Operating radius in feet from axis of rotation

Height from the ground in feet



Range diagram

YB4409XL (with four-section boom)



Operating radius in feet from axis of rotation

Helohtfrom the



Load chart

YB4409XL

(three-section boom)

	3-SECTION MAIN BOOM 3-SECTIO			3-SECTION I	MAIN BOOM
Radius	ON OUTRI	GGERS (lb)	Radius	ON RUE	BER (Ib)
(ft)	F/R	360*	(ft)	F/R	360°
5	7,000	17,000	5	10,000	10,000
6	15,700	14,400	6	9500	8200
8	12,400	10,800	8	7325	5125
10	10,200	8500	10	4875	3475
12	8500	6950	12	3550	2550
14	7100	5800	14	2750	1925
16	6000	4650	16	2150	1450
18	5200	3800	18	1775	1150
20	4450	3150	20	1450	950
22	3800	2700	22	1225	800
24	3300	2350	24	1025	650
26	2900	2050	26	875	525
27	2750	1925	27	850	475

	3-SECTI	3-SECTION MAIN BOOM W/6 FT JIB DEPLOYED			
Radius	LOADED BOOM	ON OUTRI	GGERS (lb)	ON RUE	BER (Ib)
(ft)	(deg)	F/R	360*	F/R	360*
16.4	60	3500	3500	2000	1300
18	57.5	3375	3375	1775	1150
20	53.5	3225	3150	1450	950
22	49	3075	2700	1225	800
24	44.5	2950	2350	1025	650
26	39.5	2850	2050	875	525
28	34	2625	1825	800	425
30	27	2400	1650	725	350
32	16.5	2175	1475	650	300
33.5	0	2000	1375	600	250

NOTES:

OPERATE WITH JIB BY RADIUS WHEN MAIN BOOM IS FULLY EXTENDED AND BY BOOM ANGLE WHEN MAIN BOOM IS PARTIALLY EXTENDED. DO NOT EXCEED JIB CAPACITIES AT ANY PARTIALLY EXTENDED BOOM LENGTH.

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.

SIDE SIDE REAR SIDE

REDUCTION CHART					
	FROM FROM JIB RATINGS RATINGS				
MAIN BLOCK	140 lb	N/A			
HOOK & BALL	100 lb	100 lb			
JIB, STOWED	0 lb	N/A			
JIB, DEPLOYED	150 lb	Olb			

PIGGING CHART

1-PART 0-8500 ib

WIRE ROPE: 1/2 inch diameter
Minimum breaking scrength 29,750 ib

- 1) The rated loads are the maximum lifting capacities as determined by operating radius only. Any combination of boom lengths and angles may be used to obtain operating radius. 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.
- 2) 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 training 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 outriggers are with outriggers fully extended.
- 5) Ratings on rubber depend on tire capacity, condition of tires and proper inflation pressure (100 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 operating radius not shown, use load rating of next larger radius.
- The maximum combined total boom and deck load is 12,000 lb. The maximum deck load only is 14,000 lb.
- Do not induce any external side loads to boom or jib.

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THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.

The individual crans load chart, operating instructions and other instructional plate must be read and understood prior to operating the crans.

Grove YB4400 Series



Load chart

YB4409XL (four-section boom)

	4-SECTION MAIN BOOM W/ 4TH RETRACTED			
Radius	ON OUTRIC	CCERS (Ib)	ON RUB	BER (Ib)
(ft)	F/R	360°	F/R	360°
5	17000	17000	10000	10000
6	15700	14400	9500	8200
8	12400	10800	8000	5600
10	10200	8500	5400	3800
12	8500	6950	3800	2700
14	7100	5800	2750	1950
16	6000	4650	2150	1450
18	5200	3800	1800	1150
20	4450	3150	1500	950
22	3800	2700	1300	775
24	3300	2350	1100	600
26	2900	2050	900	450
27	2750	1925	825	375

	4-SECTION MAIN BOOM W/ 4TH EXTENDED				
Radius	ON OUTRIC	GERS (lb)	ON RUB	BER (Ib)	
(ft)	F/R	360°	F/R	360*	
5 6 8 10 12 14 16 18 20 22 24 26 27 28 30	- 4900 4300 3800 3400 3100 2900 2900 2900 2900 2900 2900 2900 2	- 4900 4300 3800 3400 3100 2900 2900 2900 2950 2300 2150 2000 1800	4900 4300 3800 3400 2900 2400 1950 1600 1350 1100 1000 925 800	4900 4250 3300 2600 2100 1700 1350 1050 850 700 650 600	
32 33.5 36	2200 1975 1775	1600 1400 1250	700 625 550	400 325 250	

NOTES:

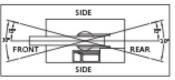
OPERATEWITH JIB BY RADIUS WHEN MAIN BOOM IS FULLY EXTENDED (WITH 4TH SECTION EXTENDED OR RETRACTED) AND BY BOOM ANGLEWHEN MAIN BOOM IS PARTIALLY EXTENDED. DO NOT EXCEED JIB CAPACITIES AT ANY PARTIALLY EXTENDED BOOM LENGTH.

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

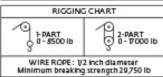
OPERATION OF THIS EQUIPMENT IN EXCESS OF RATING CHARTS AND DISREGARD OF INSTRUCTIONS IS DANGEROUS AND VOIDS WARRANTY.

		SECTION TRACTED			
Radius	LOADED BOOM	ON OUTRI	GGERS (Ib)	ONRUB	8ER (16)
(ft)	A NGLE (deg)	F/R	360°	F/R	360*
16.4 18	60 57.5	3500 3375	3500 3375	2000 1800	1300 1150
20	53.5 49	3225 3075	3150 2700	1500 1300	950 800
24	44.5	2950	2350	1100	650
26 28	39.5 34	2850 2625	2050 1825	925 800	525 425
30 32	27 16.5	2400 2175	1650 1475	725 650	350 300
33.5	0	2000	1375	600	250

	4-SECTION MAIN BOOM W/4TH EXTENDED W/6 FT JIB DEPLOYED				
Radius	LOADED BOOM	ON OUTRK	GERS (lb)	ON RUBB	ER (Ib)
(ft)	ANGLE (deg)	F/R	360*	F/R	360*
22	60	2900	2900	1600	1050
24	57	2900	2650	1350	850
26	54	2900	2300	1100	700
28	50.5	2750	2000	925	600
30	47	2450	1800	800	500
32	43	2200	1600	700	400
33.5	40	1975	1400	625	325
36	34.5	1775	1250	550	250
38	29	1650	1150	500	200
40	22.5	1550	1075	450	150
42	11.5	1450	1000	400	125
43	0	1400	950	375	100



REDUCTION CHART					
FROM FROM JIB RATINGS RATINGS					
MAIN BLOCK	140 lb	N/A			
HOOK & BALL	100 lb	100 lb			
JIB, STOWED	Olb	N/A			
JIB, DEPLOYED	150 lb	Olb			



- The rated loads are the maximum lifting capacities as determined by operating radius only. Any combination of boom lengths and angles may be used to obtain operating radius. 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.
- 2) 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 training 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 outriggers are with outriggers fully extended.
- 5) Ratings on rubber depend on tire capacity, condition of tires and proper inflation pressure (100 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 operating radius not shown, use load rating of next larger radius.
- 7) The maximum combined total boom and deck load is 12,000 lb. The maximum deck load only is 14,000 lb.
- Do not induce any external side loads to boom or jib.

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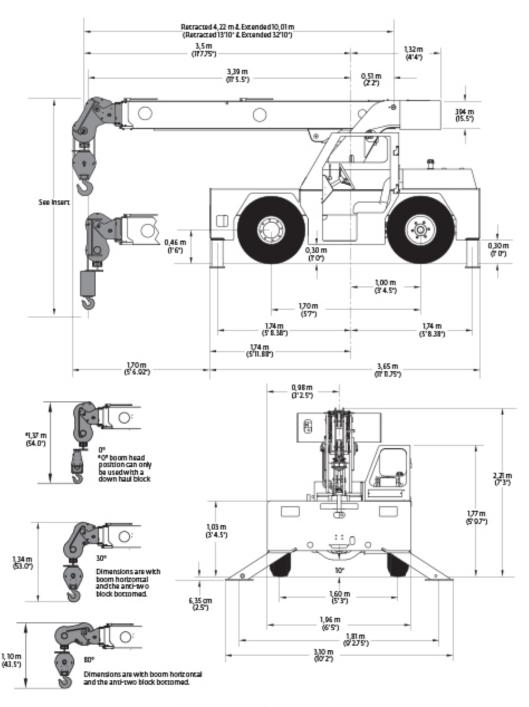
THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OVERATE THE CRANE.

The traditional cran's had there, operating instruction and other instructional plate must be mad and understood prior to operating the crans.



Dimensions

YB4409-2



Grove YB4400 Series

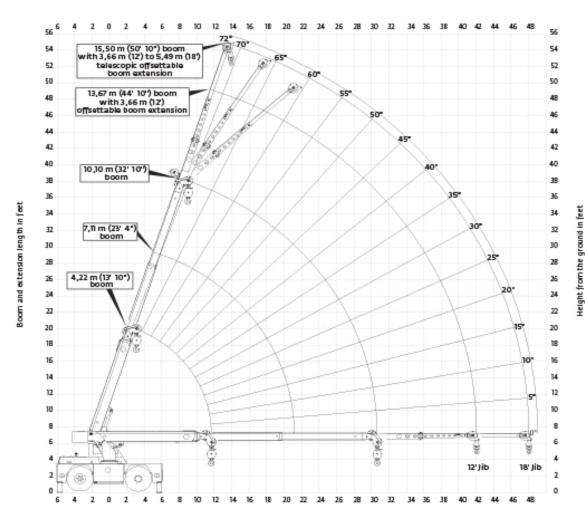
THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.

The traditional arms: bead chart, operating interactions and other instructional places must be read and understood prior to operating the curve



Range diagram

YB4409-2



Operating radius in feet from axis of rotation

16

THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.

The individual cross's lead chart, operating instruction and other instructional plane must be stud and understood prior to operating the cross.



Load chart

YB4409-2

			ONOUTR	IGGERS (lb)		ON RUI	BBER(Ib)
	RADIUS	F	yr.	36	50°	F/R	360°
		BOOM RETRACTED	BOOM Extended	BOOM RETRACTED	BOOM EXTENDED	ANY BOOM	ANY BOOM
	5.0	18,000	14,700	18,000	14,700	11,500	9400
1	6.0	15,700	14,400	15,000	14,400	10,000	7500
1	8.0	12,200	12,200	TI,400	11,400	8100	5040
1	10.0	10,200	10,200	9100	9100	5480	3530
2	12.0	8400	8400	7600	7600	3920	2590
1 8	14.0	-	7200	-	6500	3040	1970
<u>8</u>	16.0	-	6200	- 1	5310	2420	1560
MAINBOOM	18.0		5400		4340	1970	1250
€	20.0		4830		3610	1640	1020
	22.0		4000		3030	1370	850
	24.0	-	3480	-	2590	1160	710
1	26.0	-	3020	-	2250	990	590
1	28.0	-	2680	-	2010	830	490
	31.0	-	2270	-	1740	650	360
	34.0		1960		1500	510	250
1	36.0	-	1770	-	1350	430	180
1	38.0		1590	-	1200	350	130
=	40.0	-	1420	-	1050	280	80
-	42.0	-	1270	-	930	210	60
1	44.0	-	1200	-	880	190	40
1	46.0	-	TI60	-	820	170	20
	48.0	-	1110	-	760	140	0

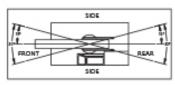
MAIN	JIB STRUCTURAL CAPACITIES (Ib)								
BOOM ANGLE		12 ft JIB		18ftJIB					
(oag)	OFFSET	159 Offset	OFFSET TBZ74O	OFFSET	OFFSET 15°	30° OFFSET			
72	7500	5100	3500	4000	3300	2300			
70	7000	4800	3400	3750	3100	2200			
65	5700	4100	3100	3200	2700	2000			
60	4500	3500	2800	2800	2400	1850			
55	3500	3000	2550	2450	2150	1700			
50	2800	2500	2300	2150	1950	1600			
45	2300	2200	2000	1900	T/50	1500			
40	2000	1900	1800	1700	1600	1400			
35	V75	1675	1600	1525	1450	1350			
30	1600	1500	1400	1400	1300	1300			
25	1450	1400		1275	1200				
20	1350	1350		1175	1125				
15	1300	1300		1100	1100				
10	1275	-		1050	-	-			
5	1225	-	- 1	1025	-	-			
0	1200			1000		-			

NOTES:

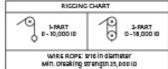
JIB CAPACITY IS LIMITED BY BOTH STRUCTURAL CAPACITY CHART AND MAIN CAPACITY CHART.

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.



REDUCTION CHART							
	FROM MAIN JIB RATINGS						
MAIN BLOCK	140 lb	N/A					
HOOK & BALL	100 lb	100 і ь					
JIB, STOWED	0 lb	N/A					
JIB, DEPLOYED	450 lb	Olb					



- The rated loads are the maximum lifting capacities as determined by operating radius only. Any combination of boom lengths and angles may be used to obtain operating radius. 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.
- 2) 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 training must all be taken into account by the operator.
- 3) 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 outriggers are with outriggers fully extended.
- 5) Ratings on rubber depend on tire capacity, condition of tires and proper inflation pressure (100 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 operating radius not shown, use load rating of next larger radius.
- The maximum combined total boom and deck load is 12,000 lb. The maximum deck load only is 14,000 lb.
- Do not induce any external side loads to boom or jib.

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Grove YB4400 Series

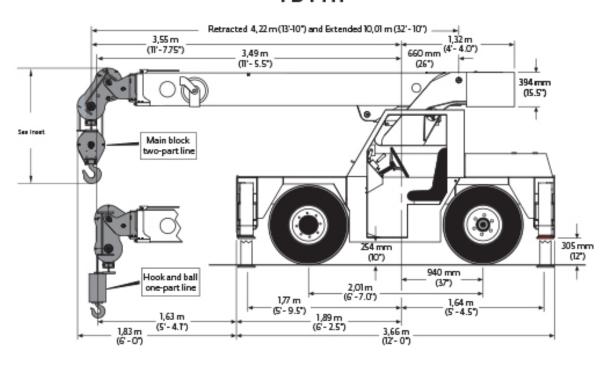
THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OVERATE THE CRANE.

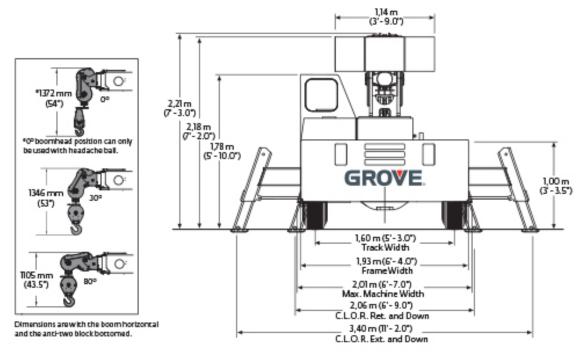
The individual cranic had chart, operating instructions and other instructional plates must be said and understood prior to operating the crans.



Dimensions

YB4411





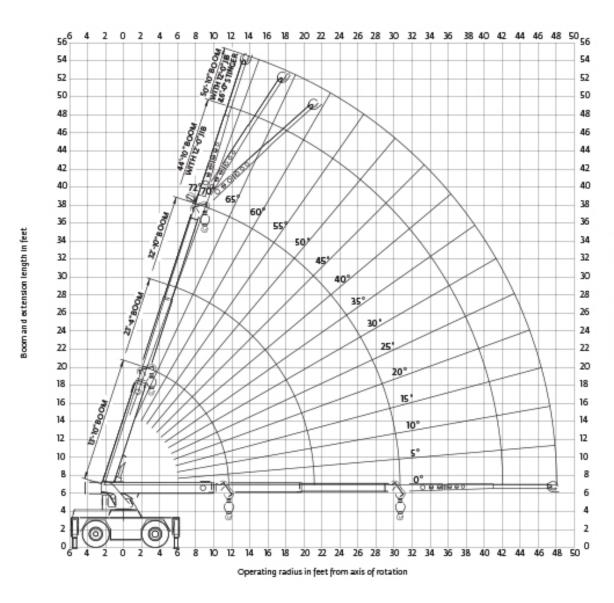
THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OVERATE THE CRANE.

The individual cran's lead chart, operating instruction and other instructional plane must be mad and understood prior to operating the crans.



Range diagram

YB4411



Height from the ground in feet

Grove YB4400 Series

THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OVERATE THE CRANE.

The individual case's lead dues, epecating instruction and other instructional plate must be read and understood prior to operating the crans.



Load chart

YB4411

			ON OUTRIG	GERS(lb)		ONRUB	BER (lb)
	RADIUS (ft)	EXTENDE RETRACT		RETRAC	LED360,	F/R	360*
	,.			BOOM RETRACTED	BOOM EXTENDED	ANY BOOM	ANY BOOM
	4.0	21,000	15,000	19,625	13,975	11,500	11,500
	5.0	18,000	14,700	16,800	13,700	11,500	9400
	6.0	15,700	14,400	13,400	13,400	10,000	7800
	8.0	12,200	12,200	8700	8700	7600	5600
	10.0	10,200	10,200	6150	6150	5175	3875
3	12.0	8400	8400	4550	4550	3850	2875
1 8	14.0	-	7100	-	3425	3000	2250
WA.IN BOOM	16.0	-	6000	-	2775	2400	1800
1 3	18.0	-	5000	-	2300	1975	1475
≥	20.0	-	4300	-	1825	1650	1200
	22.0	-	3700	-	1550	1400	1000
	24.0	-	3300	-	1275	1200	850
	26.0	-	2900	-	1075	1025	700
	28.0	-	2600	-	950	875	600
	31.0	-	2300	-	800	700	450
	34.0	-	1975	-	650	600	350
	36.0	-	1775	-	550	500	275
	38.0	-	1575	-	450	400	200
E	40.0	-	1425	-	350	300	125
=	42.0	-	1300	-	250	200	-
	44.0	-	1200	-	200	150	-
	46.0	-	1100	-	175	-	-
	48.0	-	1000	-	150	-	-

	JIBSTRUCTURALCAPACITIES (Ib)								
MAIN BOOM ANGLE		12 ft.) IB		ısftJIB					
(deg)	O* OFFSET	15° OFFSET	30* OFFSET	OFFSET	15" OFFSET	30° OFFSET			
72	7500	5100	3500	4000	3300	2300			
70	7000	4800	3400	3750	3100	2200			
65	5700	4100	3100	3200	2700	2000			
60	4500	3500	2800	2800	2400	1850			
55	3500	3000	2550	2450	2150	1700			
50	2800	2500	2300	2150	1950	1600			
45	2300	2200	2000	1900	T/50	1500			
40	2000	1900	1800	1700	1600	1400			
35	1775	1675	1600	1525	1450	1350			
30	1600	1500	1400	1400	1300	1300			
25	1450	1400		1275	1200	-			
20	1350	1350	-	1075	1125	-			
15	1300	1300	-	1100	1100	-			
10	1275	-	-	1050	-	-			
5	1225	-	-	1025	-	-			
0	1200	-	-	1000	-	-			

JIB CAPACITY IS LIMITED BY BOTH STRUCTURAL CAPACITY CHART AND MAIN CAPACITY CHART.

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.

- SIDE REDUCTION CHART FROM MAIN BOOM FROM RATINGS RATINGS MAIN BLOCK 140 lb NJA. HOOK&BALL 100 lbs IIB.STOWED Olb N/A JIB, DEPLOYED Olb RIGGINGCHART 1-PART 0-10,0001b 2-PART 0-21,0001b WIREROPE: 9/16 Inch diameter Min. breakingstrength 36,750 lb
- The rated loads are the maximum. lifting capacities as determined by operating radius, boom extension 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.
- 2) 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. Retracted outrigger rated loads meet ASME B30.5-2004. 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 training 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 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.
- 5) Ratings on rubber depend on tire capacity, condition of tires and proper inflation pressure (125 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 operating radius not shown, use load rating of next larger radius.
- 7) The maximum combined total boom and deck load is 12,000 lb. The maximum deck load only is 14,000 lb.
- B) Do not induce any external side loads to boom or jib.

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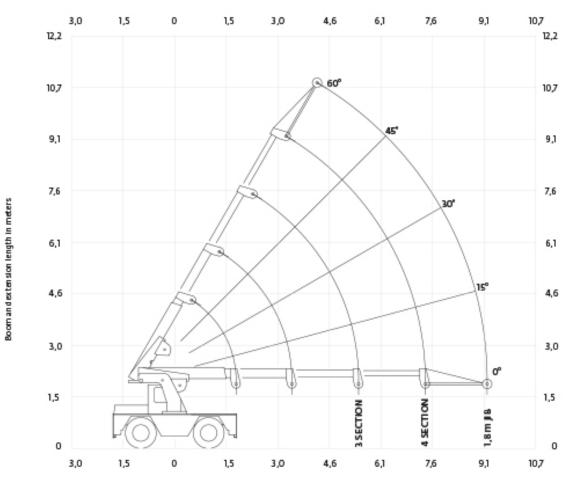
THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OFERATE THE CRANE.

The individual crane's lead chart, operating once



DIN/ISO range diagram

YB4409



Height from the ground in meters

Operating radius in meters from axis of rotation

Grove YB4400 Series

THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.

The individual cran's lead chart, operating instruction and other instructional plane must be mad and understood prior to operating the cran-



DIN/ISO load chart

YB4409

BADIUS	3-SECTION BOOM OR 4-SECTION BOOMWITH 4TH RETRACTED					PADIUS	4 SECTION BOOM WITH 4TH EXTENDED			
(m)	ON OUTRI	GCERS (kg)	CIN RUBBER (bg)		1	(m)	ON OUTRICCERS (lg)		ON RUBBER (kg)	
	F/R	160'	R/R.	360"	1	1 1	F/R	360'	R/R.	360"
15	7710	7710	4540	4380	-	15	2770	2770	2770	277 0
1,8	7120	6530	4540	3260	1	1,8	2770	2770	2770	277.0
2,4	5630	4900	3200	1970	l-	2,4	3400	2400	3400	2380
3,0	4630	3900	2080	1500	8008	3,0	2030	2130	200	1560
37	3850	3000	1520	950	18	37	3000	2000	1660	1090
4,3	3270	2250	1950	730	¥	4,3	3000	2000	1280	830
4,9	2590	1930	930	70	2	4,9	3000	2000	1010	650
5,5	2100	1470	770	460		5,5	2000	1720	820	510
67	1220	1233	670	430	٦.	- 67	18/00	1310	690	420
67	1190	1120	590	340	I١	67	1540	1110	590	340
7,5	1000	900	480	350	1	7,5	1290	540	500	270
7,9		-	-	-		7,9	1150	870	460	250
8,5	-	-			1	8,5	1080	780	410	210
93	-			-	2	- 93	570	650	350	170
9,4	-	-				9,4	930	660	330	150

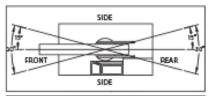
MAIN	JIB STRUCTURAL CARACITIES (kg)						
ANGLE (deg)	3-SECTION BOOM OR 4-SECTION BOOM WITH 4TH RETRACTED	4-SECTION BOOM WITH 4TH EXTENDED					
60	1580	1588					
55	1510	150.6					
50	1430	1429					
45	1360	1561					
40	13.05	1334					
35	1270	1270					
30	1325	1225					
25	180	10'8					
20	1115	104					
15	1090	1089					
10	1055	1055					
5	1020	10.21					
0	1000	998					

NOTES:

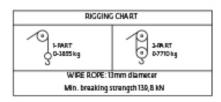
JIB CAPACITY IS LIMITED BY BOTH STRUCTURAL CAPACITY CHART AND MAIN CAPACITY CHART.

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.



REDUCTION CHART							
FROM FROM IIB RATINGS RATINGS							
MAIN BLOCK	64 kg	NA					
HOOK & BALL	45 kg	45 kg					
JIB, STOWED	Okg	N/A					
JIB, DEPLOYED	68 kg	0 kg					



- 1) The rated loads are the maximum lifting capacities as determined by operating radius only. Any combination of boom lengths and angles may be used to obtain operating radius. 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.
- 2) 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 operator, and proper training 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 outriggers are with outriggers fully extended.
- 5) Ratings on rubber depend on tire capacity, condition of tires and proper inflation pressure (6,9 bar). Loads on rubber may be transported at a maximum speed of 4 km/h on a smooth, hard, level surface with boom retracted to the shortest length possible and centered over front.
- For operating radius not shown, use load rating of next larger radius.
- 7) The maximum combined total boom and deck load is 5440 kg. The maximum deck load only is 6350 kg.
- Do not induce any external side loads to boom or jib.

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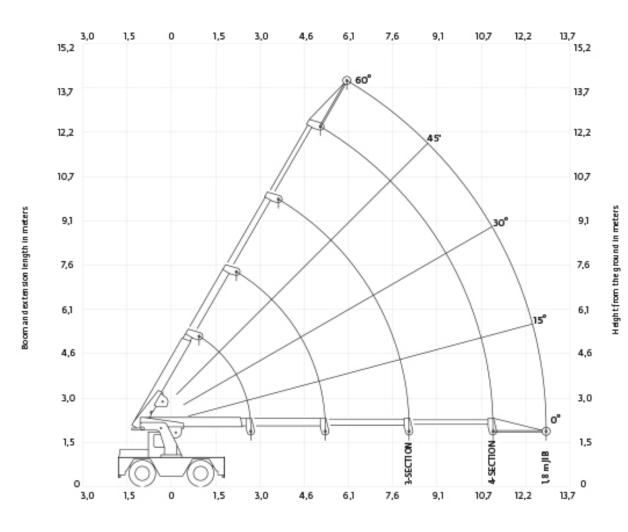
THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRAINE.
The individual cracis lead chart, operating instruction and other instructional plane must be mad and understood prior to operating the crans.

^{*}LIMIT RATINGS TO 5350 kg/WHEN 3RD SECTION IS EXTENDED ANYAMOUNT.



DIN/ISO range diagram

YB4409XL



Operating radius in meters from axis of rotation

THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.

In individual cranis lead chart, operating increation and other instructional plans must be mad and understood prior to operating the cran.

Grove YB4400 Series



DIN/ISO load chart

YB4409XL

RADIUS	3-SECTION BOOM OR 4-SECTION BOOMWITH 4TH RETRACTED						4-SECTION BOOMWITH 4TH EXTENDED			
(m)	ON OUTRI	CCERS (kg)	ON RUB	BER (kg)	1	(m)	ONOUTRI	GGERS (kg)	ONRUB	BER (kg)
	FIR	360	F/R	360"	1		F/R	360"	FIR	360
1,5	7710	7710	4535	4535		1,5	-	-	-	
1,8	7120	6530	4300	3720	1	1,8	-	-	-	-
2,4	5625	4900	3580	2490		2,4	2225	2225	2225	2225
3,0	4625	3855	2400	1670		3,0	1950	1950	1950	1880
3,7	3855	3150	1670	1070	lъ	3.7	1725	T/25	1725	1450
4,3	3220	2550	1200	830	BOOM	4,3	1540	1540	1540	1130
4,9	2720	1930	930	610	l≅	4,9	1405	1405	1270	900
5,5	2360	1570	770	470	Š	5,5	1315	1315	1040	720
6,1	1850	1290	630	380	≩	6,1	1315	1315	830	560
6,7	1570	1100	540	310		6,7	1315	1315	680	430
7,3	1360	950	450	240		7,3	1315	1080	560	340
7,9	1180	820	370	190		7,9	1315	930	450	270
8,2	1120	770	340	170	Į.	8,2	1200	860	400	240
8,5	1070	730	310	140	Λ	8,5	1120	800	370	220
9,1	970	650	290	100	I١	9,1	990	710	300	180
9,8	880	580	240	90	I١	9,8	890	630	270	130
10,2	800	530	Z20	60	I۱	10,2	790 700	540 480	230 200	100 60
11,0	-				ľ١				180	
11,6 12,2		:	[:	۱.	11,6 12,2	650 610	440 410	150	40 20
	1	:	1	:	≝		570	370	130	
12,8 13.1	1	[[[12,8	540	350	120	10

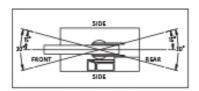
MAIN	JIB STRUCTURAL CARACITIES (kg)						
ANGLE (dag)	3-SECTION BOOM OR 4-SECTION BOOM WITH 4TH RETRACTED	4-SECTION BOOM WITH 4TH EXTENDED					
60	1500	1540					
55	1510	1405					
50	1430	1295					
45	1360	1180					
40	1305	1100					
35	1270	1045					
30	1225	1000					
25	1180	975					
20	1035	965					
15	1090	955					
10	1055	930					
5	1020	920					
0	1000	905					

NOTES

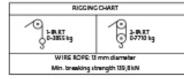
JIB CAPACITY IS LIMITED BY BOTH STRUCTURAL CAPACITY CHART AND MAIN CAPACITY CHART.

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.



REDUCTION CHART							
	FROM MAIN BOOM RATINGS	FROM JIB RATINGS					
MAIN BLOCK	64 kg	N/A					
HOOKEMIL	46 kg	46 kg					
JIB, STOWED	0 kg	N/A					
JIB, DEPLOYED	68 kg	0 kg					



- 1) The rated loads are the maximum lifting capacities as determined by operating radius only. Any combination of boom lengths and angles may be used to obtain operating radius. 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.
- 2) 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 operator, and proper training 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 outriggers are with outriggers fully extended.
- 5) Ratings on rubber depend on tire capacity, condition of tires and proper inflation pressure (6,9 bar). Loads on rubber may be transported at a maximum speed of 4 km/h on a smooth, hard, level surface with boom retracted to the shortest length possible and centered over front.
- For operating radius not shown, use load rating of next larger radius.
- 7) The maximum combined total boom and deck load is 5443 kg. The maximum deck load only is 6350 kg.
- Do not induce any external side loads to boom or jib.

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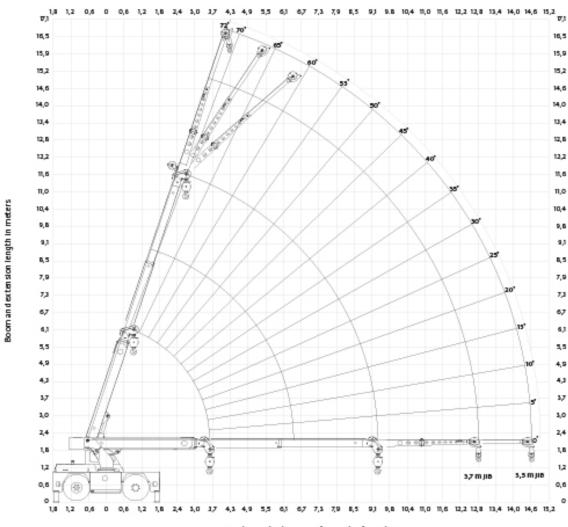
THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.

The individual cran's had chart, operating instruction and other instructional plane must be mad and understood prior to operating the cran.



DIN/ISO range diagram

YB4409-2



Operating radius in meters from axis of rotation

Height from the ground in meters



DIN/ISO load chart

YB4409-2

		$\overline{}$						
				ON OUTRI	CGERS (kg)		ON RUB	BER (kg)
		RADIUS (m)	F/	IR.	36	0"	F/R	360°
		,	BOOM RETPACTED	BOOM EXTENDED	BOOM RETRACTED	BOOM EXTENDED	ANY BOOM	ANY BOOM
Г		1,5	8160	6570	8160	6670	5220	4260
1		1,8	7120	6530	6800	6530	4540	3360
1		2,4	5530	5530	5170	5170	3670	2240
1		3,0	4630	4630	4130	4130	2440	1550
1	2	3.7	3810	3810	3450	3450	1730	1130
1	8	4,3	-	3270	-	2800	1330	840
1	₫	4,9	-	2810	-	2220	1050	660
1	MAIN BOOM	5,5	-	2450	-	1800	850	520
1	≥	6,1	-	2010	-	1490	700	420
1		6.7	-	1670	-	1250	570	340
1		7,3	-	1430	-	1060	480	280
1		7,9	-	1240	-	910	400	220
1		8,5	-	1090	-	310	330	170
1		9,4	-	920	-	690	250	120
г		10,4	-	780	-	590	150	70
1		11,0	-	710	-	530	150	40
1		11,6	-	630	-	460	mo	10
1	ent.	12,2	-	560	-	400	80	0
ı	≅	12,8	-	490	-	350	50	0
ı		13,4	-	460	-	320	40	0
1		14,0	-	440	-	300	30	0
L		14,6	-	430	-	270	20	0

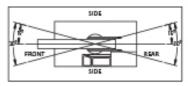
	JIB STRUCTURAL CARACITIES (kg)						
BOOM	37 m JIB			5,5 m JIB			
(deg)	0" OFFSET	15" OFFSET	30" OFFSET	0" OFFSET	15* OFFSET	30" OFFSET	
72	3400	2310	1590	1810	1500	1040	
70	3180	2180	1540	7700	1400	1000	
65	2590	1860	1410	1450	1220	910	
60	2040	1590	1270	1270	1090	840	
55	1590	1360	1160	mo	980	770	
50	1270	1130	1040	980	880	730	
45	1040	1000	910	860	790	680	
40	910	860	820	770	730	640	
35	810	760	730	690	660	610	
30	730	680	640	640	590	590	
25	660	640		580	540		
20	610	610	-	530	570	-	
15	590	590	-	500	500	-	
10	580		-	430	-	-	
5	560		-	460		-	
0	540	-	-	450	-	-	

NOTES:

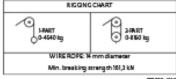
JIB CAPACITY IS LIMITED BY BOTH STRUCTURAL CAPACITY CHART AND MAIN CAPACITY CHART.

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.



REDUCTION CHART				
	FROM MAIN BOOM BATINGS	FROM JIB RATINGS		
MAIN BLOCK	60 kg	M/A.		
HOOKEBALL	46 kg	45 kg		
JIB, STOWED	Dkg	M/A.		
JIS, DEPLOYED	100 kg	Оkg		



- The rated loads are the maximum lifting capacities as determined by operating radius, boom extension 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.
- 2) 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 training 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 outriggers are for outriggers fully extended.
- 5) Ratings on rubber depend on tire capacity, condition of tires and proper inflation pressure (700 kPA). 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 operating radius not shown, use load rating of next larger radius.
- 7) The maximum combined total boom and deck load is 5440 kg. The maximum deck load only is 6350 kg.
- Do not induce any external side loads to boom or jib.

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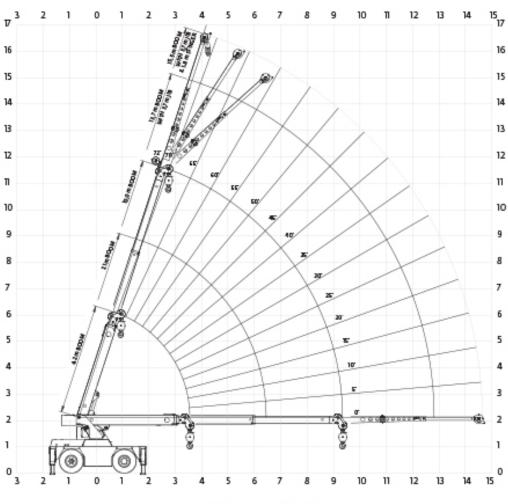
THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OFERATE THE CRANE.

The individual cran's had chare, operating instruction and other instructional place must be used and understood prior to operating the crans.



DIN/ISO range diagram

YB4411



Operating radius in meters from axis of rotation

Height from the ground in meters

Boom and extension length in meters



DIN/ISO load chart

YB4411

		ON OUTRIGGERS (kg)				ON RUBBER (kg)	
	RADIUS (m)	EXTENDED 360' RETRACTED F/R		RETRACTED 360"		₽R	360"
	""	BOOM RETRACTED	BOOM EXTENDED	BOOM RETRACTED	BOOM EXTENDED	ANY BOOM	ANY BOOM
	1,2	9530	6800	9530	6800	5220	5220
	1,5	8160	6670	8160	6670	5220	4260
	1,8	7120	6530	6530	6530	4540	3540
	2,4	5530	5530	3960	3960	3670	2680
	3,0	4630	4630	2810	2810	2720	1810
2	3.7	3800	3800	2090	2090	2040	1310
8	4,3	-	3220		1970	1590	1040
=	4,9	-	2720		1270	1270	820
MANBOOM	5,5	-	2270	-	1060	1040	680
2	6,1	-	1790		850	860	540
	6,7	-	1530		720	730	430
	7,3	-	1360		590	630	380
	7,9	-	1190		510	540	320
	8,5	-	1060		440	480	270
	9,4	-	930		380	360	180
	10.4		790	-	310	270	110
	11,0	-	710		270	230	80
_	11,6		620		220	180	40
	12,2	-	560	-	180	150	10
=	12,8	-	510	-	13.0	110	0
	13,4	-	460	-	TO	90	0
	14,0	-	420	-	90	80	0
	14,6	-	380	-	80	70	0

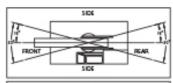
	JIB STRUCTURAL CAPACITIES (kg)						
MAIN BOOM ANGLE	3,7 m.jlB			5,5 m,18			
(dag)	OFFSET	15" OFFSET	30' OFFSET	OFFSET	OFFSET	OFFSET 30'	
72	3400	2310	1590	1810	1500	1040	
70	3180	2180	1540	700	1410	1000	
65	2590	1860	1410	1450	1220	900	
60	2040	1590	1270	1270	1090	340	
55	1590	1360	1160	100	980	770	
50	1270	1130	1040	980	880	730	
45	1040	1000	900	860	790	680	
40	910	860	820	770	730	640	
35	800	760	730	690	660	610	
30	730	680	640	640	590	590	
25	660	640	-	580	540	-	
20	600	610	-	530	510	-	
15	590	590		500	500	-	
10	580	-	-	480	-	-	
5	560	-		460		-	
ō	540	-		450		-	

NOTES:

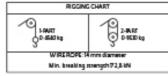
JIB CAPACITY IS LIMITED BY BOTH STRUCTURAL CAPACITY CHART AND MAIN CAPACITY CHART.

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.



REDUCTION CHART				
	FROM MAIN BOOM RATINGS	RATINGS		
MAIN BLOCK	60 kg	N/A		
HOOKEMIL	46 kg	46 kg		
JIB, STOWED	Okg	N/A		
JIR, DEPLOYED	200 kg	Okg		



- The rated loads are the maximum lifting capacities as determined by operating radius only. Any combination of boom lengths and angles may be used to obtain operating radius. 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.
- 2) 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, operacting radius, and other factors affecting stability. Hazardous surroundings, climatic conditions, experience of operator, and proper training must all be taken into account by the operator.
- The weights of all load handling devices such as hooks, hook blocks, slings, etc., excpet the hoist rope, shall be considered as part of the load. See reduction chart.

- Ratings on outriggers are with outriggers fully extended.
- 5) Ratings on rubber depend on tire capacity, condition of tires and proper inflation pressure (6,9 bar). Loads on rubber may be transported at a maximum speed of 4 km/h on a smooth, hard level surface with boom retracted to the shortest length possible and centered over front.
- For operating radius not shown, use load rating of next larger radius.
- 7) The maximum combined total boom and deck load is 5440 kg. The maximum deck load only is 6350 kg.
- Do not induce any external side loads to boom or jib.

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THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OVERATE THE CRANE.

The individual cran's lead chart, operating instructions and other instructional plane must be mad and understood prior to operating the crans.



Notes

Grove YB4400 Series 29



Notes



Notes

Grove YB4400 Series 31



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