

Grove YB725

Quick Reference

- Capacity:** 22 t (25 Ust)
- Boom:** 7,21 m - 21,6 m (23 ft 8 in - 71 ft) main boom
- Max jib:** 5,1 m (17 ft)
- Max tip height:** 28,9 m (95 ft)

FEATURES

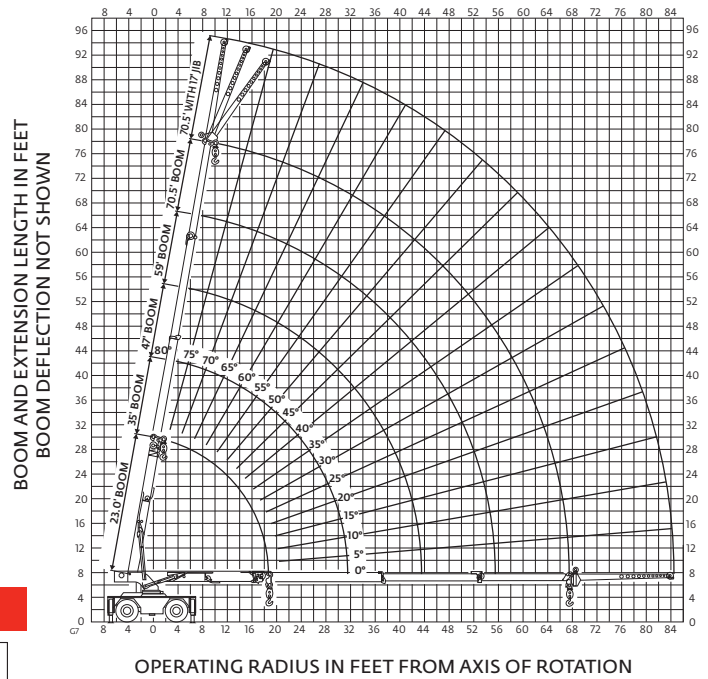
- 7,21 m - 21,6 m (23 ft 8 in - 71 ft) four-section main boom
- 5,1 m (17 ft) offsettable bi-fold swingaway extension
- Cummins QSB 4.5 L engine rated at 974 kW (130 bhp) at 2500 rpm
- 13,6 t (15 Ust) deck carrying capacity
- Tilt steering wheel
- Load sensing piston hydraulic pump
- Proportional hydraulic controls
- New split door design with optional enclosed cab

Load chart

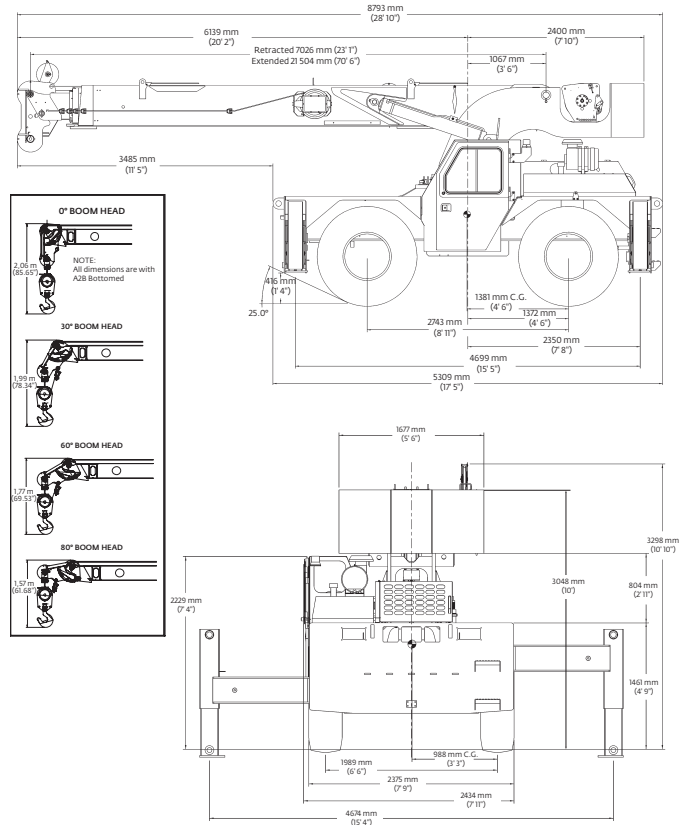
MAIN BOOM LOAD RATINGS ON OUTRIGGERS Extended and Down 360° or Retracted and Down Front/Rear											
		23.0 ft Boom		35.0 ft Boom		47.0 ft Boom		59.0 ft Boom		70.5 ft Boom	
Radius (ft)	Boom Angle (deg)	Rated Load (lb)	Boom Angle (deg)	Rated Load (lb)	Boom Angle (deg)	Rated Load (lb)	Boom Angle (deg)	Rated Load (lb)	Boom Angle (deg)	Rated Load (lb)	
8.5	64.5	50,000	73.5	34,300	78.5	33,600	80	27,800			
10	60	38,750	71	34,500	76.5	33,000	78	25,900			
12	54	34,850	67	31,200	74	29,250	76	24,100	79	18,200	
14	47	31,250	63.5	28,450	71	26,350	74	22,400	77.5	16,750	
16	39	26,700	59.5	26,050	68.5	24,000	74	20,750	75.5	15,500	
18	29	23,150	55.5	23,500	66	22,100	72	20,750	74.5	14,650	
19.5	0	21,000	52	21,500	63.5	20,900	70.5	19,550	72	13,400	
22	-	-	46	18,450	60	18,600	67.5	17,850	72	13,400	
24	-	-	41	16,550	57	16,750	65	16,300	70.5	12,500	
26	-	-	36	14,600	54	14,850	63	14,200	68.5	11,750	
28	-	-	29	12,750	51	13,050	60.5	13,150	67	11,050	
30	-	-	20	11,250	47.5	11,600	58.5	11,700	65.5	9,800	
31.5	-	-	0	10,300	45	10,650	56.5	10,750	64	9,400	
34	-	-	-	-	40	9,350	53.5	9,480	61.5	8,850	
36	-	-	-	-	36	8,460	51	8,590	60	8,400	
38	-	-	-	-	31	7,680	48.5	7,830	57	7,940	
40	-	-	-	-	25	7,000	45.5	7,150	55	7,270	
42	-	-	-	-	17.5	6,400	42.5	6,550	53	6,680	
43.5	-	-	-	-	0	6,000	40.5	6,000	51.5	6,270	
46	-	-	-	-	-	-	36	5,440	48.5	5,680	
48	-	-	-	-	-	-	32.5	5,040	46.5	5,250	
50	-	-	-	-	-	-	28	4,680	44	4,860	
52	-	-	-	-	-	-	23	4,350	41.5	4,510	
54	-	-	-	-	-	-	16	4,040	38.5	4,190	
55.5	-	-	-	-	-	-	0	3,820	36.5	3,960	
58	-	-	-	-	-	-	-	-	32.5	3,620	
60	-	-	-	-	-	-	-	-	29	3,370	
62	-	-	-	-	-	-	-	-	25	3,130	
64	-	-	-	-	-	-	-	-	20	2,920	
66	-	-	-	-	-	-	-	-	13	2,720	
67	-	-	-	-	-	-	-	-	0	2,620	

MAIN BOOM LOAD RATINGS ON OUTRIGGERS Retracted and Down 360°											
		23.0 ft Boom		35.0 ft Boom		47.0 ft Boom		59.0 ft Boom		70.5 ft Boom	
Radius (ft)	Boom Angle (deg)	Rated Load (lb)	Boom Angle (deg)	Rated Load (lb)	Boom Angle (deg)	Rated Load (lb)	Boom Angle (deg)	Rated Load (lb)	Boom Angle (deg)	Rated Load (lb)	
8.5	63.5	26,350	73	24,000	78	21,900					
10	59	20,800	70.5	19,300	76	17,900	79.5	16,650			
12	52.5	16,000	67	15,100	73.5	14,200	77.5	13,350			
14	45.5	12,300	63	12,250	71	11,600	75.5	11,000	79	10,500	
16	37	9,850	59.5	10,150	68.5	9,710	73.5	9,280	77	8,870	
18	26	8,070	55.5	8,370	65.5	8,230	71.5	7,910	75.5	7,590	
19.5	0	7,090	52	7,300	63.5	7,330	70	7,060	74	6,810	
22	-	-	46.5	5,900	60	6,050	67.5	5,900	72	5,720	
24	-	-	41.5	5,040	57	5,170	65	5,150	70	5,000	
26	-	-	36	4,330	54	4,450	63	4,520	68.5	4,400	
28	-	-	29	3,740	51	3,850	60.5	3,930	66.5	3,880	
30	-	-	20	3,250	47.5	3,340	58.5	3,410	65	3,420	
31.5	-	-	0	2,910	45	3,010	56.5	3,080	63.5	3,120	
34	-	-	-	-	40	2,530	53.5	2,590	61	2,640	
36	-	-	-	-	36	2,200	51	2,260	59	2,310	
38	-	-	-	-	31	1,910	48.5	1,960	57	2,010	
40	-	-	-	-	25	1,660	45.5	1,700	55	1,750	
42	-	-	-	-	17.5	1,410	42.5	1,470	53	1,510	
43.5	-	-	-	-	0	1,230	40.5	1,310	51.5	1,350	
46	-	-	-	-	-	-	36	1,070	48.5	1,110	
48	-	-	-	-	-	-	32.5	890	46.5	930	
50	-	-	-	-	-	-	28	720	44	780	
52	-	-	-	-	-	-	23	570	41.5	630	
54	-	-	-	-	-	-	16	430	38.5	500	
55.5	-	-	-	-	-	-	0	330	36.5	410	
58	-	-	-	-	-	-	-	-	32.5	270	
60	-	-	-	-	-	-	-	-	-	-	
62	-	-	-	-	-	-	-	-	-	-	
64	-	-	-	-	-	-	-	-	-	-	
66	-	-	-	-	-	-	-	-	-	-	
67	-	-	-	-	-	-	-	-	-	-	

Working range



Dimensions



SUPERSTRUCTURE

Boom

7,21 m - 21,6 m (23 ft 8 in - 71 ft) full power main boom.

Four-section with three powered sections.

Maximum tip height: 24,0 m (79 ft).

*Optional offsettable swingaway extension

5,1m (17 ft) offsettable bi-fold swingaway extension. Offsets 0°, 15°, and 30° via pivoting boom nose. Stows alongside base boom section.

Maximum tip height: 28,9 m (95 ft).

Boom nose

Two nickel plated steel sheaves mounted on heavy duty tapered roller bearings with removable pin-type rope guards. Quick reeve type boom nose with four-position (0°, +30°, +60°, and +80°) pivoting to minimize head height requirements. Lowers head height by 0,6 m (2 ft).

Boom elevation

Two double acting hydraulic cylinders with integral holding valves provides elevation from -0° to +80°.

Anti-Two block device

Standard anti-two block device, which, when activated, provides an audible warning to the operator and “locks-out” all 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.

(wireless system)

*Load Moment Indicator

“Graphics Display” of boom angle, boom length, boom radius, capacity, and allows for operator input to set the limit parameters based on the load chart. Displays color coded light bar and audible alarm with function cut-out if load exceeds the entered parameters.

(hardwired system)

Swing

Ball bearing swing circle with 360° continuous rotation.

Hydraulic motor driven pinion with brake.

Maximum speed: 2.5 rpm

Hydraulic system

One pressure compensated variable displacement axial piston pump with load sensing combined with -2- gear pumps.

Maximum output of 238 LPM (79 GPM).

Maximum operating pressure: 248 bars (3600 psi).

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

227 L (60 gal) hydraulic reservoir with sight level gauge and steel side plating to guard against side impacts.

10 micron return line filter with full flow by-pass protection and service indicator.

Hoist

Piston motor driven with automatic spring applied / hydraulically released wet brake.

Maximum hoist pull (first layer): 6804 kg (15,000 lb)

Maximum permissible single line pull: 5670 kg (12,500 lb) (3.5:1 design factor)

Maximum single line speed: 61 m/min (200 fpm)

Rope construction: 6X19 XIPS/IWRC

Rope diameter: 16 mm (5/8 in)

Rope length: Main hoist: 119 m (390 ft)

Maximum rope stowage: main hoist: 151 m (495 ft)

CARRIER

Chassis

High strength alloy frame constructed with integral outrigger housings; front and rear lifting, tie-down, and towing lugs. 60 ft² carry deck size with 13 608 kg (30,000 lb) deck only carrying capacity. Deck coated with anti-skid treatment.

Outriggers

Two-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 cylinders.

Outrigger pad size: 29,2 cm x 29,2 cm (11.5 in x 11.5 in)

Maximum outrigger pad load: 20 321 kg (44,800 lb) / 330 p.s.i.

Outrigger controls

Independent outrigger control rocker switches for beam or jack selection with separate extend/retract rocker switch. 360° bubble level located inside cab.

Engine (Tier III)

Cummins QSB 4.5L, four cylinders / turbo-charged diesel rated at 974 kW (130 bhp) (Gross) at 2500 rpm. Standard 110V engine block heater and cold weather “ether” assist system. Engine hour meter located inside operators compartment.

Maximum torque: 370 N-m (273 ft lb) at 2500 rpm.

Fuel tank capacity

189 L (50 gal)

Transmission

Powershift with four speeds forward and reverse. Stalk mounted direction shifter with rotary gear selection.

Operator's 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 suspension seat with seat belt, hourmeter, sight level bubble, and 1,1 kg (2.5 lb) fire extinguisher.

The dash panel includes a multi-cluster gauge showing fuel, water temperature, oil pressure, and battery voltage. An engine monitoring indicator strip shows engine warning, stop engine, transmission low pressure, transmission high temperature, and low brake system pressure. The LSI (load indicator) receiver is mounted to the top of the dash panel.

*Operator's control station enclosed

Includes the standard cab shell with the addition of front, rear, and right side glass, a split (2 piece) hinged door with sliding glass, front windshield wiper and washer, hot water heater and defroster with fan and cab dome light are included.

Electrical system

Two 12V maintenance-free batteries, 820CCA @ 0°. 63 amp alternator.

Drive

2 wheel (rear drive) or 4 wheel selection, front and rear axle drive with planetary hubs and limited slip differential.

Steer

Standard three steering modes. Front two-wheel, four-wheel coordinated, and four-wheel crab steer with electronic self alignment, three-position rocker selector on dash panel.

Outside turning radius:

Two-wheel steer: 7,32 m (24 ft)

Four-wheel steer: 4,04 m (13 ft 3 in)

Suspension/axles

Front: Drive/steer with differential and planetary reduction hubs rigid mounted to frame.

Rear: Drive/steer with differential and planetary reduction hubs pivot mounted to frame allows up to 3.5° of oscillation.

Oscillation lockouts

Manual switch to engage and disengage the rear axle lockouts. Engage when lifting on rubber and in crab steer mode, Disengage to allow oscillation when traveling over rough terrain.

Brakes

Hydraulic actuated internal wet-disc service brake acting on all four wheels. Dash mounted toggle switch with light for activating or release of the dry disc parking brake mounted on the transmission output yoke.

Tires

Standard: 17.5 x 25 Bias
Optional: 17.5R25 radials

Lights

Full lighting including turn indicators, head, tail, brake and hazard warning lights recessed mounted.

Maximum speed

31,3 km/h (19.5 mph)

Gradeability (theoretical)

63%..... (at engine stall) NO LOAD
38%.....(at engine stall) with
13 608 kg (30,000 lb) DECK LOAD

Gross vehicle weight

Open cab: 19 786 kg (43,620 lb)
Closed cab: 20 285 kg (44,720 lb)

Miscellaneous standard equipment

22 t (25 USt) Two sheave “galvanize coated” hookblock, with “quick Reeve”. Back-up motion alarm
Outrigger motion alarm
Dual rear-view mirrors

**Denotes optional equipment*