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GROVE. **YB4415/YB4415XT**



INDUSTRIAL CRANE

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This information is for reference use only. Operators manual should be consulted and adhered to. Please contact Bigge Crane and Rigging Co. at 888-337-BIGGE or email info@bigge.com for further information.

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Superstructure Specifications

Boom

17 ft. - 40 ft. (5.1 m - 12.2 m) three-section full power boom. Maximum tip height: 47 ft. (14.4 m). Speeds: 32 seconds (ext.); 19 seconds (retract).

*Optional Boom

21 ft. - 52 ft. (6.5 m - 15.6 m) three-section full power boom. Maximum tip height: 59 ft. (18.0 m). Speeds: 43 seconds (ext.); 25 seconds (retract).

*Fixed Boom Extension (non-offsettable)

15 ft. (4.6 m) swingaway extension w/single metallic sheave in point. Stows alongside base boom section for travel. Extends tip heights to 62 ft. (18.9 m) or 74 ft. (22.5 m) with the 40 ft. (12.2 m) and 52 ft. (15.6 m) booms respectively.

*Offsettable Boom Extension

15 ft. (4.6 m) swingaway extension w/single metallic sheave in point. Stows alongside base boom section for travel. Extends tip heights to 62 ft. (18.9 m) or 74 ft. (22.5 m) with the 40 ft. (12.2 m) and 52 ft. (15.6 m) booms respectively. Can be offset at 0° or 45° to increase up and over reach.

Boom Nose

Two (2) position low profile and quick reeve design with two metallic sheaves mounted on tapered roller bearings and quick removable pin-type rope guards. Head pivots forward (up) to the low profile position (1-2 parts of line only & max 70° boom elevation) for minimizing head space requirements or rearward (down) to the conventional position for maximum lifts that exceed 2 parts of line reeving or approximately 18,000 lbs. (8165 kg).

Boom Elevation

Twin double acting hydraulic cylinders with integral holding valves provide elevation from 0° to 80°. Mechanical boom angle indicator. Speeds: 20 seconds (ext.) 14 seconds (retract).

Anti-Two Block Device - The standard low profile type anti-two block device, when activated, provides an audible-visual warning to the crane operator and disengages all crane functions whose movement can cause two-blocking.

*Rated Capacity Limiter (RCL)

A simple, effective and easy to use overload protection system in conjunction with a low profile type anti-two block (A2B) device assists the operator in the efficient operation of the unit. The RCL system constantly monitors actual lifting conditions versus allowable capacity ratings to assist in preventing an overload condition. It provides the operator with a visual pre-warning at approximately 90% of the rated capacity and an audible-visual warning in combination with automatic lockout at approximately 100% of rated capacity.

Swing

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Ball bearing swing circle with 360° continuous rotation. Hydraulic motor driven worm and gear reducer. Maximum speed: 2.0 RPM.

Counterweight

4,300 lbs. (1950 kg) w/40 ft. (12.2 m) boom; 4,800 lbs. (2177 kg) w/52 ft. (15.6 m) boom; bolted to the turntable.

Hydraulic System

Three (3) section main gear pumps driven off torque converter through PTO.

Combined capacity: 75 GPM (285 LPM).

Maximum system operating pressure: 3,500 psi (241 bar).

Three valve banks mounted on top of dash panel with direct mechanical linkage low effort lever controls.

Return line type filter with full flow by-pass protection and service indicator. 10 micron rated replaceable cartridges.

54 gallon (205 L) reservoir with sight level gauge and steel plate to guard against side impact damage.

*Remote-mounted oil cooler with thermostatically controlled electric motor driven fan.

System pressure and flow test ports with quick release type fittings for each circuit.

HOIST SPECIFICATIONS - Model HP12-13G

Planetary reduction with automatic spring applied multi-wet-disc brake and grooved hoist drum. *Cable follower available.

Drum Dim. (Dia. x Lg.)

10.63" x 13.4" (270 mm x 341 mm)

Maximum Single Line Pull:

10,930 lbs. (4958 kg)

Maximum Single Line Speed:

134 - 178 FPM (41 - 54 m/min)

Maximum Permissible Single Line Pull: Standard Rope 5/8" (16 mm) (6 x 37 Class):

*Optional Rope 5/8" (16 mm) (18 x 19 Class):

9,080 lbs. (5:1 FOS) (4119 kg)

250 ft. (76.2 m) w/40 ft. (12.2 m) boom

310 ft. (94.5 m) w/52 ft. (15.6 m) boom

9,080 lbs. (3.5:1 FOS)

(4119 kg)

Rope Length (Std.):

Maximum Rope Stowage:

Usable:

374 ft. of 5/8" (114 m of 16 mm)

269 ft. of 5/8" (82 m of 16 mm)

*Denotes optional equipment

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Chassis Specifications

Frame

High strength alloy steel construction with integral outrigger housings; front/rear lifting, towing and tie down lugs and recessed lifting points in all four corners of deck top. Carry deck constructed of 1/4" (6 mm) thick plate steel w/surface area of 66 sq. ft. (6.1 m²) and anti-skid deck treatment.

Outriggers

Front and rear oblique type beams at all four corners with integral holding valves. Outrigger pads form an integral part of the beam and have a surface area of 103 sq. in. (665 cm²).

Maximum outrigger pad load: 26,539 lbs. (12 038 kg).

Outrigger Controls, Synchronized

Controls are located on dash panel and operate beams in pairs from side to side. Two hand sequence minimizes unintentional actuation. Sight leveling bubbles located inside operator's compartment. *Independent control of each individual beam is available.

Engine, Dual Fuel (Gas/LPG)

General Motors 4.3 L, six cylinder, dual fuel (LPG/gas) engine, 115 bhp (85 kW) (Gross) @ 2,500 RPM. 100 amp alternator. Maximum torque: 275 ft. lbs. (373 Nm) @ 2,200 RPM.

*Engine, Diesel

Cummins 4BT3.9 L turbo-charged diesel, four cylinder, 110 bhp (82 kW) (Gross) @ 2,500 RPM. Maximum torque: 293 ft. lbs. (397 Nm) @ 1,500 RPM.

Operator's Control Station

The frame mounted, open air style control station with overhead canopy includes all crane function and driving controls. Other standard equipment includes a durable nylon cushion seat with lap belt; hourmeter; sight level bubble and fire extinguisher. The dash panel includes engine oil pressure gauge; engine water temperature gauge; voltmeter; all critical engine monitoring instruments; engine/transmission A/V distress system; outrigger controls; *A2B warning indicators; parking/emergency brake toggle switch with warning light and hooded panel light. The dash panel also includes an RCL panel and RCL warning indicators when the machine is equipped with the *RCL. All control valves are mounted on top of dash area for ease of operation and increased leg room.

Overhead Canopy

Tubular steel construction with steel mesh covering on top and right side grill type guard. Not available with enclosed cab option.

*Cab, Enclosed

Fully enclosed galvannealed sheet metal structure replaces standard overhead canopy. Includes hot water forced air heater/defroster, safety glass throughout, hinged removable door, sliding left and right side glass for cross ventilation, door lock, electric windshield wiper/ washer, fixed skylight glass, circulating air fan, rear deck storage shelf area behind operator's seat.

Fuel Tank Capacity

46 gallon (175 L) all steel construction w/steel plate to guard against side impact damage.

Electrical System

One 12 V - maintenance free battery. 875 CCA. Includes standard 12 V remote slave receptacle wired directly to the starter to facilitate jump starting. Automotive type color coded fuses, number coded wiring and water tight connectors.

Drive

4 x 2 - Front axle drive only with planetary hubs and limited slip differential. *4 x 4 (YB4415XT) - Front and rear drive/steer axles with planetary hubs and limited slip differentials.

Steering

All wheel ($\overline{4}$ wheel), full hydraulic power via steering wheel permits two modes of operation: 2 wheel (rear only) or four-wheel coordinated. Inside dash-mounted selector switch to select steering mode.

Transmission

Remote mounted Clark 3 speed forward and reverse full powershift w/engine mounted torque converter and stalk type shift control mounted to the steering column. Controls permit quick and easy shuttle control between forward and reverse travel.

Axles

Front: Planetary drive/steer with internal multi-wet-disc brakes and limited slip differential. Rear: (4 x 2) Fabricated steer axle with internal wet disc brakes.

(4x4 drive) Planetary drive/steer with internal wet disc brakes and limited slip differential.

Tires

Standard 385/65R22.5-18 PR tubeless radial traction tread.

Suspension

Front: Mounted rigid to frame. Rear: Mounted on rubber blocks to permit oscillation for operation on semiunimproved terrain.

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 mounted warning light. Parking brake acts on both front wheels of 2 wheel drive models and on all 4 wheels of *4 wheel drive (XT) models.

Lights

Recessed mounted behind grill type frame cutouts and includes head, tail, turn signals, brake and 4-way hazard warning lights.

Maximum Speed

19 MPH (30 kph)

Gradeability (Theoretical)

75% (Based on 27,000 lbs. [12 247 kg] GVW).

*Tow Winch

Hydraulic winch mounted behind the front bumper area and operated from within the operator's compartment using the Swing/Tow winch control lever via selector switch. Hydraulic powered unit has a bare drum pull of 6,000 lbs. (2722 kg) at 48 ft./min. (14.6 m/min.) single line speed. Includes 100 ft. (30.5 m) length of 3/8" diameter 6 x 25 EIPS IWRC wire rope, hook and thimble, 4 way roller guide and winch mounted drum release lever to permit free spooling the rope from the drum. Winch is not designed for any type of vertical lifting.

Miscellaneous Standard Equipment

Hookblock tiedown sling, electronic combination two-tone back-up and outrigger motion alarm, front and rear running lights, tool stowage well, 15 ton (15 MT) capacity two sheave quick reeve hookblock, powertrain audio-visual distress warning system, 12 V remote slave receptacle for jump starting, R/S convex rearview mirror.

*Optional Equipment

- * Worklight package consists of three 12V, ball mounted, manually adjustable worklights (2-cab/canopy mounted and 1 boom mounted)
- * 360° amber flashing light wired to ignition switch
- * Ether injection & block heater cold weather starting kit (less canister) for diesel only
- * Engine block heater only (Dual Fuel Engine)
- * Pintle hooks front/rear
- * Carry deck posts
- * Spark arrestor muffler(s) (Dual Fuel only)
- * Sound suppression package for under 90 dBa cab noise levels
- * Dual rearview west coast mirrors
- * Hydraulic system oil cooler
- * Quick Reeve Overhaul weight with 5 ton (4.5 MT) hook
- * Engine tachometer, dash mounted * Deluxe operator's fabric seat w/spring suspension and dual armrests

*Denotes optional equipment

DOVE VRAAIS/VRAAISYI





RATED LIFTING CAPACITIES IN POUNDS ON OUTRIGGERS FULLY EXTENDED - 360°

Radius		Ν	lain Boom L	ength in Fe	et	
Feet	* 17 (18.4)	* 20 (21.4)	* 25 (26.4)	* 30 (31.4)	* 35 (36.4)	* 40 (41.4)
6	30,000	28,950	28,200	27,850	27,650	
8	28,050	28,100	28,150	27,800	26,400	23,750
10	23,000	23,100	23,150	23,200	22,450	20,650
12	18,100	18,250	18,350	18,450	18,500	17,550
14		14,750	14,850	14,900	14,950	14,950
16		12,300	12,450	12,450	12,500	12,500
18			10,600	10,650	10,700	10,700
20			9,070	9,070	9,070	9,070
22				7,760	7,760	7,760
24				6,740	6,740	6,740
26				5,930	5,930	5,930
28					5,260	5,260
30					4,710	4,710
32						4,240
34						3,840
36						3,490
Mir	nimum boom	n angle (°) fo	or indicated	length (no lo	ad)	0
Maxim	um boom lei	ngth (ft.) at () degree bo	om angle (n	o load)	40
	Liftir	ng Capacity On Outrigge	at Zero Deg ers Fully Ex	ree Boom A tended 360°	ngle	
Boom		N	lain Boom L	ength in Fe	et	
Angle	* 17 (18.4)	* 20 (21.4)	* 25 (26.4)	* 30 (31.4)	* 35 (36.4)	* 40 (41.4)
0°	9,080 (13.3)	8,100 (16.3)	5,940 (21.3)	4,600 (26.3)	3,720 (31.3)	3,070 (36.3)

17 FT. - 40 FT. BOOM

Note: () Reference radii in feet. (Applicable to boom nose sheaves in down position only.) A6-829-100221B

*Boom length varies between boom nose sheaves in down position (in bold), or up & out

position (in parenthesis).

- 1. Capacities do not exceed 85% of tipping loads as determined by test in accordance with SAE J765.
- 2. Capacities appearing above the bold line are based on structural strength and tipping should not be relied upon as a capacity limitation.
- 3. With boom nose sheaves down (in lower position), single, 2-part or 4-part line may be used. With boom nose sheaves up and out (low profile position), single or 2-part line may be used, with maximum boom angle limited to 70°.

THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE. The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.



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RATED LIFTING CAPACITIES IN POUNDS ON RUBBER

STATIONARY - 360°

Radius		N	lain Boom L	ength in Fe.	et	
Feet	* 17 (18.4)	* 20 (21.4)	* 25 (26.4)	* 30 (31.4)	*35 (36.4)	*40 (41.4)
6	14,700	14,700	14,700	14,700	14,700	
8	11,500	11,500	11,500	11,500	11,500	11,500
10	8,930	8,930	9,050	9,050	9,050	9,050
12	6,900	7,020	7,020	7,020	7,020	7,020
14		5,400	5,540	5,620	5,680	5,780
16		4,320	4,510	4,540	4,600	4,600
18			3,600	3,740	3,850	3,850
20			2,990	3,120	3,150	3,200
22				2,590	2,650	2,650
24				2,110	2,170	2,200
26				1,740	1,820	1,820
28					1,440	1,560
30					1,280	1,280
32						1,060
34						860
36						770
Mir	nimum boorr	n angle (°) fo	or indicated	length (no la	ad)	0
Maxim	um boom le	ngth (ft.) at () degree bo	om angle (n	o load)	40
	Liftir	ng Capacity O	at Zero Deg n Rubber 36	ree Boom A 60°	ngle	
Boom		N	lain Boom L	ength in Fe.	et	
Angle	* 17 (18.4)	* 20 (21.4)	* 25 (26.4)	* 30 (31.4)	*35 (36.4)	*40 (41.4)
0°	5,990 (13.3)	4,230 (16.3)	2,430 (21.3)	1,680 (26.3)	1,130 (31.3)	770 (36.3)
Note: () Refe in down posit	erence radii in ion only.)	feet. (Applicat	ble to boom no	se sheaves	A6-8	329-100222B

*Boom length varies between boom nose sheaves in down position (in bold), or up & out position (in parenthesis).

1. Capacities are in pounds and do not exceed 75% of tipping loads as determined by test in accordance with SAE J765. 2. Capacities are applicable to machines equipped with 385/65R22.5 (J) Firestone T839 tires at 140 psi cold inflation pressure.

3. Defined Arc - Over front includes 6° on either side of longitudinal centerline of machine.

- 4. Capacities are applicable only with machine on firm level surface.
- All rubber lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation pressures. Damaged tires are hazardous to safe operation of crane.

6. For pick and carry operation, the boom, using the shortest practical boom length, must be centered over front of machine. When handling loads in the structural range with capacities close to maximum ratings, travel should be reduced to creep speed*. 2.5 m.p.h. capacities are permissible on main boom only, NOT on boom extension.

*Creep - not over 200 ft. of movement in any 30 minute period and not exceeding 1 mph. 7. With boom nose sheaves down (in lower position), single, 2-part or 4-part line may be used. With boom nose sheaves up

and out (low profile position), single or 2-part line may be used, with maximum boom angle limited to 70°.

Radius		N	lain Boom L	ength in Fe	et	
Feet	* 17 (18.4)	* 20 (21.4)	* 25 (26.4)	*30 (31.4)	*35 (36.4)	*40 (41.4
6	18,700	18,700	18,700	18,700	18,700	
8	15,050	15,050	15,050	15,050	15,050	15,050
10	12,500	12,500	12,500	12,500	12,500	12,500
12	10,600	10,600	10,600	10,600	10,600	10,600
14		9,190	9,190	9,190	9,190	9,190
16		8,040	8,040	8,040	8,040	8,040
18		r	6,870	6,870	6,870	6,870
20			5,760	5,760	5,760	5,760
22		2		4,910	4,910	4,910
24				4,250	4,250	4,250
26				3,620	3,710	3,710
28					3,270	3,270
30					2,800	2,880
32						2,580
34						2,110
36						1,620
Mi	nimum boom	n angle (°) fo	or indicated	length (no lo	ad)	0
Maxim	ium boom le	ngth (ft.) at () degree bo	om angle (n	o load)	40
	Liftir On	ng Capacity Rubber - De	at Zero Deg fined Arc a	ree Boom A nd Pick & Ca	ingle arry	
Boom		N	lain Boom L	ength in Fe	et	
Angle	*17 (18.4)	* 20 (21.4)	* 25 (26.4)	* 30 (31.4)	*35 (36.4)	* 40 (41.4)
0°	9,690 (13.3)	7,920 (16.3)	5,210 (21.3)	3,610 (26.3)	2,630 (31.3)	1,520 (36.3)

DEFINED ARC OVER FRONT DICK & CARRY AND STATIONARY

in down position only.)

*Boom length varies between boom nose sheaves in down position (in bold), or up & out position (in parenthesis).

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DOVE VB//15/VB//15YT





15 FT. EXTENSION RATED LIFTING CAPACITIES IN POUNDS

Radius	Main Boom Length in Feet							
Feet	17	20	25	30	35	40		
6	9,080	9,080	9,080	9,080				
8	9,080	9,080	9,080	9,080	9,080	9,080		
10	8,850	9,080	9,080	9,080	9,080	9,080		
12	7,860	8,450	9,080	9,080	9,080	9,080		
14	7,060	7,610	8,480	9,080	9,080	9,080		
16	6,410	6,590	7,730	9,080	9,080	8,900		
18	5,870	6,340	7,100	8,390	8,330	8,090		
20	5,410	5,850	6,570	7,750	7,640	7,420		
22	5,020	5,440	6,110	7,260	7,040	6,840		
24	4,680	5,070	5,710	6,720	6,530	6,340		
26	4,380	4,760	5,360	6,140	6,070	5,900		
28	3,740	4,380	5,050	5,480	5,480	5,480		
30		4,190	4,770	4,930	4,930	4,930		
32			4,410	4,470	4,470	4,470		
34			3,790	4,070	4,070	4,070		
36			2,730	3,730	3,730	3,730		
38				3,420	3,420	3,420		
40				3,160	3,160	3,160		
45					2,610	2,610		
50						2,190		
	Liftin	g Capacity a On Outrigge	at Three Deg ers Fully Ext	gree Boom ended - 360	Angle °			
Boom		N	lain Boom L	ength in Fe	et			
Angle	17	20	25	30	35	40		
3°	2,700 (29)	2,450 (32)	1,990 (37)	1,560 (42)	1,240 (47)	1,000 (52)		

ON OUTRIGGERS FULLY EXTENDED - 360°

NOTES:

- 1. All capacities above the bold line are based on structural strength of boom extension and do not exceed 85% of tipping loads on outriggers in accordance with SAE J765.
- 2. 15 ft. boom extension may be used for single line lifting service only.
- 3. **WARNING:** Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning.
- 4. Capacities listed are with fully extended outriggers only.
- 5. No load stability on outriggers fully extended 360° with 15 ft. extension installed:
 - a. Minimum boom angle for 40 ft. main boom = 0°
 - b. Maximum main boom length at 0° main boom angle = 40 ft.
- 6. When lifting loads the minimum allowable boom angle is 3°.

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15 FT. EXTENSION RATED LIFTING CAPACITIES IN POUNDS ON RUBBER

STATIONARY 360°

Radius		N	lain Boom L	om Length in Feet			
Feet	17	20	25	30	35	40	
6	8,070	8,070	8,070	**8,070			
8	8,070	8,070	8,070	8,070	**7,550		
10	8,070	8,070	8,070	8,070	7,550	7,040	
12	7,850	7,840	7,710	7,710	7,550	7,040	
14	6,400	6,300	6,200	6,000	5,890	5,890	
16	5,250	5,130	5,030	5,030	5,030	5,030	
18	4,470	4,420	4,420	4,420	4,310	4,210	
20	3,790	3,790	3,650	3,650	3,620	3,590	
22	3,260	3,260	3,120	3,120	3,010	3,010	
24	2,820	2,760	2,640	2,610	2,610	2,570	
26	2,460	2,430	2,340	2,300	2,300	2,300	
28	2,170	2,100	2,040	1,980	1,980	1,980	
30		1,880	1,820	1,720	1,690	1,690	
32			1,560	1,530	1,470	1,440	
34			1,390	1,330	1,250	1,250	
36			1,150	1,150	1,060	1,060	
38				960	880	880	
40				830	700	700	
45					520	520	
	Liftin	g Capacity On Rub	at Three De ber Stationa	gree Boom Iry - 360°	Angle		
Boom		N	lain Boom L	ength in Fe	et		
Angle	17	20	25	30	35		
3°	2,110 (29)	1,760 (32)	1,100 (37)	750 (42)	490 (47)		

15 FT. EXTENSION RATED LIFTING CAPACITIES IN POUNDS ON RUBBER STATIONARY - DEFINED ARC OVER FRONT

25

8,070

8,070

8,070

8,070

8.070

7.730

7,100

6,520

5.580

4,840

4,240

3.750

3,330

2,980

2 680

2,410

Lifting Capacity at Three Degree Boom Angle On Rubber - Defined Arc Over Front

25

1.990

(37)

Main Boom Length in Fee

Main Boom Length in Feet

30

**8.070

8,070

8,070

8 070

8,070

8.070

7,760

6,520

5.580

4,840

4,240

3,750

3,330

2,980

2 680

2,410

2,180

1.970

30

1.560

(42)

35

7,550

7,550

7 550

7.550

7.550

7.550

6,520

5.580

4,840

4,240

3,750

3,330

2,980

2 680

2,410

2,180

1.970

1,550

35

1.240

(47)

40

7,550

7 550

7,550

7.550

7.550

6,520

5.580

4.840

4,240

3,750

3,330

2,980

2 680

2,410

2,180

1.970

1,550

1,220

40

1.000

(52)

6-829-100226

NOTES:

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loads on rubber in accordance with SAE J765.

2. 15 ft. boom extension may be used for single line lifting service only.

pressures. Damaged tires are hazardous to safe operation of crane.

b. Maximum main boom length at 0° main boom angle = 30 ft.

with boom extension occurs rapidly and without advance warning. 8. No load stability on rubber 360° with 15 ft. extension installed:

a. Minimum boom angle for 40 ft, main boom = 40°

9. When lifting loads the minimum allowable boom angle is 3°

5. Capacities are applicable only with machine on firm level surface

Radius

Feet 6

8

10

12

14

16

18

20

22

24

26

28

30

32

34

36

38

40

45

50

Boom

Angle

3°

BİGGE

** This capacity based o Note: () Ref. radii in feet

17

8,070

8,070

8,070

7.850

7.060

6.410

5,870

5,410

5.020

4,680

4,240

3,740

17

2.700

(29)

DOVE VRAA15/VRAA15YT

20

8,070

8,070

8,070

8,070

7.610

6.590

6,340

5,850

5.440

4.840

4,240

3,750

3,330

20

2.450

(32)

NOTES:

1. All capacities above the bold line are based on structural strength of boom extension and do not exceed 75% of tipping

loads on rubber in accordance with SAE J765.

with boom extension occurs rapidly and without advance warning. 8. No load stability on rubber 360° with 15 ft. extension installed: a. Minimum boom angle for 40 ft. main boom = 30° b. Maximum main boom length at 0° main boom angle = 35 ft.

9. When lifting loads the minimum allowable boom angle is 3°

permitted. A Capacities are applicable to machines equipped with 385/65R22.5 (J) Firestone T839 tires at 140 psi cold inflation pressure.
 Capacities are applicable only with machine on firm level surface.
 All rubber lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation

pressures. Damaged tires are hazardous to safe operation of crane. 7. WARNING: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping

1. All capacities above the bold line are based on structural strength of boom extension and do not exceed 75% of tipping

3. Defined Arc - Over front includes 6° on either side of longitudinal centerline of machine. Pick and carry lifting NOT permitted. 4. Capacities are applicable to machines equipped with 385/65R22.5 (J) Firestone T839 tires at 140 psi cold inflation pressure.

6. All rubber lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation

7. WARNING: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping

2.15 ft. boom extension may be used for single line lifting service only.
 3. Defined Arc - Over front includes 6° on either side of longitudinal centerline of machine. Pick and carry lifting NOT

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15 FT. OFFSETTABLE EXTENSION AT 0° OFFSET RATED LIFTING CAPACITIES IN POUNDS

ON OUTRIGGERS FULLY EXTENDED - 360°

Radius		N	lain Boom L	ength in Fe	et	
Feet	17	20	25	30	35	40
6	9,080	9,080	9,080	9,080		
8	9,080	9,080	9,080	9,080	9,080	*9,080
10	8,180	8,820	9,080	9,080	9,080	9,080
12	7,240	7,830	8,760	9,080	9,080	9,080
14	6,500	7,030	7,890	8,690	9,080	9,080
16	5,840	6,390	7,170	7,920	8,630	9,080
18	5,200	5,780	6,580	7,280	7,940	8,560
20	4,700	5,210	6,070	6,730	7,350	7,940
22	4,270	4,740	5,520	6,260	6,840	7,400
24	3,910	4,340	5,060	5,780	6,400	6,940
26	3,600	4,000	4,660	5,310	6,000	6,460
28	3,330	3,700	4,320	4,940	5,480	5,480
30		3,440	4,020	4,600	4,930	4,930
32			3,760	4,300	4,470	4,470
34			3,530	4,040	4,070	4,070
36			3,310	3,730	3,730	3,730
38				3,380	3,380	3,380
40				3,080	3,080	3,080
45					2,460	2,460
50						1,980
	Liftin	g Capacity a On Outrigge	at Three De ers Fully Ext	gree Boom ended - 360	Angle i	
Boom		N	lain Boom L	ength in Fe	et	
Angle	17	20	25	30	35	40
3°	3,260 (29)	3,260 (32)	3,260 (37)	2,810 (42)	2,250 (47)	1,820 (52)

NOTES:

1. All capacities above the bold line are based on structural strength of boom extension and do not exceed 85% of tipping loads on outriggers in accordance with SAE J765.

2. 15 ft. boom extension may be used for single line lifting service only. 3. WARNING: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning.

 Capacities listed are with fully extended outriggers only.
 No load stability on outriggers fully extended 360° with 15 ft. extension installed at 0° offset: a. Minimum boom angle for 40 ft. main boom = 0° b. Maximum main boom length at 0° main boom angle = 40 ft.

Note: () Ref. radii in feet. *This capacity based on maximum boom angle.

A6-829-100724 6. When lifting loads the minimum allowable boom angle is 3° at 0° offset.

15 FT. OFFSETTABLE EXTENSION AT 45° OFFSET RATED LIFTING CAPACITIES IN POUNDS

ON OUTRIGGERS FULLY EXTENDED - 360°

Radius	Main Boom Length in Feet								
Feet	17	20	25	30	35	40			
12	4,310								
14	4,140	4,210	4,300						
16	4,000	4,070	4,170	4,240	4,300				
18	3,890	3,950	4,050	4,130	4,200	4,260			
20	3,810	3,860	3,960	4,040	4,110	4,170			
22	3,740	3,800	3,880	3,960	4,030	4,090			
24		3,740	3,820	3,890	3,960	4,020			
26			3,780	3,830	3,900	3,960			
28			3,720	3,790	3,850	3,900			
30				3,760	3,810	3,850			
32					3,780	3,820			
34					3,740	3,790			
36					3,710	3,730			
38						3,380			
	Lifting	Capacity at I On Outrigge	Forty Eight I ers Fully Ext	Degree Boo ended - 360	m Angle °				
Boom		N	lain Boom L	ength in Fe	et				
Angle	17	20	25	30	35	40			
48° **	3,710 (23.5)	3,710 (25.7)	3,710 (29.2)	3,710 (32.7)	3,670 (36.3)	3,110 (39.8)			

Note: () Ref. radii in feet. ** Radii are with the extension at horizontal.

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NOTES:

All capacities above the bold line are based on structural strength of boom extension and do not exceed 85% of tipping loads on outriggers in accordance with SAE J765.
 15 ft. boom extension may be used for single line lifting service only.

- To to boom extension may be used or single mine ming service only.
 WARNING: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning.
 Capacities listed are with fully extended outriggers only.
 No load stability on outriggers fully extended 360° with 15 ft. extension installed at 45° offset:

 a. Minimum boom angle for 40 ft. main boom = 45°
 b. Maximum main boom length at 45° main boom angle = 40 ft.
 When lifting loads the minimum allowable boom angle is 48° at 45° offset.





THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE. The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.

DOVE VD4 15/VB//15YT



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This information is for reference use only. Operators manual should be consulted and adhered to.



loads on rubber in accordance with SAE J765.

permitted.

4. Capacities are applicable to machines equipped with 385/65R22.5 (J) Firestone T839 tires at 140 psi cold inflation pressure.

5. Capacities are applicable only with machine on firm level surface.

6. All rubber lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation pressures. Damaged tires are hazardous to safe operation of crane.

7. WARNING: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping

with boom extension occurs rapidly and without advance warning. 8. No load stability on rubber 360° with 15 ft. extension installed at 45° offset:

a. Minimum boom angle for 40 ft. main boom = 45° b. Maximum main boom length at 45° main boom angle = 40 ft.

9. When lifting loads the minimum allowable boom angle is 48° at 45° offset

2.15 ft. boom extension may be used for single line lifting service only.
 3. Defined Arc - Over front includes 6° on either side of longitudinal centerline of machine. Pick and carry lifting NOT

NOTES: 1. All capacities above the bold line are based on structural strength of boom extension and do not exceed 75% of tipping

15 FT. OFFSETTABLE EXTENSION AT 45° OFFSET
RATED LIFTING CAPACITIES IN POUNDS ON RUBBER
STATIONARY 360°

25

4,300

4,170

4.050

3.700

3,160

2,730

2,370

2.070

Lifting Capacity at Forty Eight Degree Boom Angle On Rubber - 360°

25

1 920

(29.2

Main Boom Length in Feet

Main Boom Length in Feet

30

4,240

4.130

3.700

3,160

2,730

2,370

2.070

1.760

1,570

30

1 5 3 0

(32.7

35

*4,300

4.200

3.700

3,160

2,730

2,370

2.030

1.760

1.570

1,320

35

1 100

(36.3)

40

4,260 3,700

3,160

2,730

2,370 2.030

1,760

1,570

1,270

1,040

860

40

670

(39.8)

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Main Boom Length in Feet

30

750 (42)

25

1,080

(37)

8	8,070	8,070	8,070	8,070	*7,550			
10	8,070	8,070	8,070	8,070	7,550	7,040		
12	7,240	7,710	7,710	7,710	7,550	7,040		
14	6,400	6,300	6,200	6,000	5,780	5,780		
16	4,970	4,920	4,920	4,620	4,570	4,570		
18	4,170	4,170	4,120	3,900	3,900	3,860		
20	3,660	3,660	3,440	3,390	3,390	3,180		
22	3,110	3,060	2,960	2,790	2,680	2,680		
24	2,680	2,580	2,490	2,430	2,330	2,330		
26	2,330	2,280	2,160	2,000	2,000	2,000		
28	2,070	2,050	2,040	1,910	1,810	1,700		
30		1,810	1,750	1,610	1,560	1,440		
32			1,440	1,390	1,340	1,230		
34			1,260	1,190	1,080	1,030		
36			1,110	1,060	950	950		
38				860	810	690		
40				830	700	600		
Lifting Capacity at Three Degree Boom Angle On Rubber - 360°								

15 FT. OFFSETTABLE EXTENSION AT 0° OFFSET RATED LIFTING CAPACITIES IN POUNDS ON RUBBER STATIONARY 360°

25

8,070

Main Boom Length in Feet

30

*8,070

35

40

Radius

in

Feet

6

Boom

Angle

3°

Radius

in

Feet 12

> 14 16

18

20

22

24

26

28 30

32

34

36

38

Boom Angle

48° **

Note: () Ref. radii in fe

17

1,940

(29)

17

4.310 4,140

4,000

3.890

3.700

3,160

17

2 830

(23.5

Note: () Ref. radii in feet. * This capacity based on maximum boom angle

Radii are with the extension at horizonta

20

1,660 (32)

20

4,210

4,070

3.950

3.700

3,160

2.730

20

2 4 2 5

(25.7

m boom angle

17

8.070

20

8,070

a. Minimum boom angle for 40 ft. main boom = 38°; for 35 ft. main boom = 20° b. Maximum main boom length at 0° main boom angle = 30 ft. A6-829-100726 9. When lifting loads the minimum allowable boom angle is 3° at 0° offset.

7. WARNING: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning. 8. No load stability on rubber 360° with 15 ft. extension installed at 0° offset:

6. All rubber lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation pressures. Damaged tires are hazardous to safe operation of crane.

Capacities are applicable to machines equipped with 385/65R22.5 (J) Firestone T839 tires at 140 psi cold inflation pressure.
 Capacities are applicable only with machine on firm level surface.

3. Defined Arc - Over front includes 6° on either side of longitudinal centerline of machine. Pick and carry lifting NOT permitted.

NOTES: 1. All capacities above the bold line are based on structural strength of boom extension and do not exceed 75% of tipping

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loads on rubber in accordance with SAE J765. 2. 15 ft. boom extension may be used for single line lifting service only.

15 FT. OFFSETTABLE EXTENSION AT 0° OFFSET RATED LIFTING CAPACITIES IN POUNDS ON RUBBER

STATIONARY - DEFINED ARC OVER FRONT									
Radius		Main Boom Length in Feet							
Feet	17	20	25	30	35	40			
6	8,070	8,070	8,070	*8,070					
8	8,070	8,070	8,070	8,070	7,550				
10	8,070	8,070	8,070	8,070	7,550	7,550			
12	7,240	7,830	8,070	8,070	7,550	7,550			
14	6,500	7,030	7,890	8,070	7,550	7,550			
16	5,840	6,390	7,170	7,920	7,550	7,550			
18	5,200	5,780	6,580	7,280	7,550	7,550			
20	4,700	5,210	6,070	6,520	6,520	6,520			
22	4,270	4,740	5,520	5,580	5,580	5,580			
24	3,910	4,340	4,840	4,840	4,840	4,840			
26	3,600	4,000	4,240	4,240	4,240	4,240			
28	3,330	3,700	3,750	3,750	3,750	3,750			
30		3,300	3,300	3,300	3,300	3,300			
32			2,930	2,930	2,930	2,930			
34			2,600	2,600	2,600	2,600			
36			2,320	2,320	2,320	2,320			
38				2,070	2,070	2,070			
40				1,850	1,850	1,850			
45					1,400	1,400			
50						1,050			
	Liftin	g Capacity On Rubber	at Three De Defined Ar	gree Boom A c Over Fron	Angle t				
Boom		N	lain Boom L	ength in Fe	et				
Angle	17	20	25	30	35	40			
3°	2,700 (29)	2,450 (32)	1,990 (37)	1,560 (42)	1,240 (47)	930 (52)			

Note: () Ref. radii in feet. *This capacity based on maximum boom angle.

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NOTES:

1. All capacities above the bold line are based on structural strength of boom extension and do not exceed 75% of tipping loads on rubber in accordance with SAE J765.

St. book may be used for single line lifting service only.
 Defined Arc- Over front includes 6° on either side of longitudinal centerline of machine. Pick and carry lifting NOT permitted.

Capacities are applicable to machines equipped with 385/65R22.5 (J) Firestone T839 tires at 140 psi cold inflation pressure.
 Capacities are applicable only with machine on firm level surface.

All rubber lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation pressures. Damaged tires are hazardous to safe operation of crane.

WARNING: Operation of this machine with heavier loads that the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning.
 No load stability on rubber (defined arc) with 15 ft. extension installed at 0° offset:

- a. Minimum boom angle for 40 ft. main boom = 0°
 b. Maximum main boom length at 0° main boom angle = 40 ft.
- 9. When lifting loads the minimum allowable boom angle is 3° at 0° offset.

15 FT. OFFSETTABLE EXTENSION AT 45° OFFSET RATED LIFTING CAPACITIES IN POUNDS ON RUBBER

STATIONARY - DEFINED ARC OVER FRONT

Radius		Ν	1ain Boom L	ength in Fe	et	
Feet	17	20	25	30	35	40
12	4,310					
14	4,140	4,210	4,300			
16	4,000	4,070	4,170	4,240	4,300	
18	3,890	3,950	4,050	4,130	4,200	4,260
20	3,810	3,860	3,960	4,040	4,110	4,170
22	3,740	3,800	3,880	3,960	4,030	4,090
24		3,740	3,820	3,890	3,960	4,020
26			3,780	3,830	3,900	3,960
28			3,720	3,750	3,750	3,750
30				3,310	3,310	3,310
32				2,930	2,930	2,930
34					2,610	2,610
36						2,320
38						2,080
	Lifting	Capacity at I On Rubber	Forty Eight	Degree Boo c Over Fron	m Angle t	

Boom	Main Boom Length in Feet							
Angle	17	20	25	30	35	40		
48° **	3,710 (23.5)	3,710 (25.7)	3,470 (29.2)	2,810 (32.7)	2,280 (36.3)	1,880 (39.8)		

Note: () Ref. radii in feet. ** Radii are with the extension at horizontal.

NOTES: 1. All capacities above the bold line are based on structural strength of boom extension and do not exceed 75% of tipping

An capacities above the bold multiple are based on structural strength of bold exceed 75% of upping loads on rubber in accordance with SAE J765.
 I5 ft. boom extension may be used for single line lifting service only.
 Defined Arc-Over front includes 6° on either side of longitudinal centerline of machine. Pick and carry lifting NOT permitted.
 Capacities are applicable to machines equipped with 385/65R22.5 (J) Firestone T839 tires at 140 psi cold inflation pressure.
 Capacities are applicable on propertire inflation, capacity and condition. Capacities must be reduced for lower tire inflation.

pressures. Damaged tires are hazardous to safe operation of crane

7. WARNING: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning.

8. No load stability on rubber (defined arc) with 15 ft. extension installed at 45° offset:
 a. Minimum boom angle for 40 ft. main boom = 45°
 b. Maximum main boom length at 45° main boom angle = 40 ft.

9. When lifting loads the minimum allowable boom angle is 48° at 45° offset.

THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE. The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.

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RATED LIFTING CAPACITIES IN POUNDS ON OUTRIGGERS FULLY EXTENDED - 360°

Radius	Main Boom Length in Feet								
Feet	* 21 (22.8)	* 25 (26.4)	* 30 (31.4)	* 35 (36.4)	* 40 (41.4)	* 45 (46.4)	* 52 (53.4)		
6	30,000	25,450	25,100	24,900	**24,200				
8	27,600	25,450	25,100	24,900	24,200	**21,800			
10	22,350	22,450	22,550	22,600	22,650	21,800	**18,500		
12	18,200	18,300	18,400	18,500	18,500	18,550	18,300		
14	15,150	15,250	15,300	15,400	15,400	15,450	15,500		
16	12,550	12,700	12,750	12,800	12,850	12,900	12,900		
18		10,750	10,850	10,900	10,950	10,950	11,000		
20		9,270	9,400	9,450	9,490	9,500	9,500		
22			8,090	8,090	8,090	8,090	8,090		
24			7,000	7,000	7,000	7,000	7,000		
26			6,130	6,130	6,130	6,130	6,130		
28				5,410	5,410	5,410	5,410		
30				4,820	4,820	4,820	4,820		
32					4,310	4,310	4,310		
34					3,880	3,880	3,880		
36					3,510	3,510	3,510		
38						3,180	3,180		
40						2,890	2,890		
44							2,410		
48							2,020		
	Minimum	boom angle	(0°) for indi	cated length	n (no load)		0		
	Maximum	i boom leng	th (ft.) at 0° l	boom angle	(no load)		52		
Lifting Capacity at Zero Degree Boom Angle On Outriggers Fully Extended 360°									
Boom			Main B	oom Length	in Feet				
Angle	* 21 (22.8)	* 25 (26.4)	* 30 (31.4)	* 35 (36.4)	* 40 (41.4)	* 45 (46.4)	* 52 (53.4)		
0 °	7,190 (17.7)	5,970 (21.3)	4,740 (26.3)	3,850 (31.3)	3,170 (36.3)	2,630 (41.3)	1,990 (48.3)		

21 FT. - 52 FT. BOOM

Note: () Reference radii in feet. (Applicable to boom nose sheaves in down position only.)

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*Boom length varies between boom nose sheaves in down position (in bold), or up & out position (in parenthesis).

**Capacity based on maximum boom angle.

- 1. Capacities do not exceed 85% of tipping loads as determined by test in accordance with SAE J765.
- 2. Capacities appearing above the bold line are based on structural strength and tipping should not be relied upon as a capacity limitation.
- 3. With boom nose sheaves down (in lower position), single, 2-part or 4-part line may be used. With boom nose sheaves up and out (low profile position), single or 2-part line may be used, with maximum boom angle limited to 70°.

THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE. The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.





RATED LIFTING CAPACITIES IN POUNDS ON RUBBER

		S	TATIONA	RY - 360	0		
Radius			Main B	oom Length	in Feet		
Feet	* 21 (22.8)	* 25 (26.4)	* 30 (31.4)	*35 (36.4)	* 40 (41.4)	*45 (46.4)	* 52 (53.4)
6	16,400	16,400	16,400	16,400	**16,400		
8	11,900	11,900	11,900	11,900	11,900	**11,900	
10	9,190	9,190	9,190	9,190	9,190	9,190	**9,150
12	7,350	7,350	7,350	7,350	7,350	7,350	7,270
14	5,540	5,690	5,690	5,690	5,690	5,740	5,740
16	4,360	4,360	4,360	4,360	4,360	4,360	4,360
18		3,750	3,750	3,750	3,750	3,750	3,750
20		3,000	3,000	3,000	3,000	3,000	3,000
22			2,590	2,590	2,590	2,590	2,590
24			2,030	2,030	2,030	2,030	2,030
26			1,790	1,790	1,790	1,790	1,790
28				1,500	1,500	1,500	1,500
30				1,290	1,290	1,290	1,290
32					1,170	1,170	1,170
34					820	820	820
Mir	imum boom	angle (0°) f	or indicated	length (no le	oad)	24	38
Ma	iximum boor	n length (ft.)	at 0° boom	angle (no lo	ad)	4	0
		Lifting Ca	pacity at Zer On Rub	o Degree B ber 360°	oom Angle		
Boom			Main B	oom Length	in Feet		
Angle	* 21 (22.8)	* 25 (26.4)	* 30 (31.4)	*35 (36.4)	* 40 (41.4)		
0°	3,700	2,660	1,600	1,050	640 (36.3)		

Note: () Reference radii in feet. (Applicable to boom nose sheaves in down position only.)

*Boom length varies bet parenthesis). boom nose sheaves in down position (in bold), or up & out position (in

*Capacity based on maximum boom angle

1. Capacities are in pounds and do not exceed 75% of tipping loads as determined by test in accordance with SAE J765. Capacities are applicable to machines equipped with 385/65R22.5 (J) Firestone T839 tires at 140 psi cold inflation pressure.
 Defined Arc - Over front includes 6° on either side of longitudinal centerline of machine.

4. Capacities are applicable only with machine on firm level surface.

5. All rubber lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation pressures. Damaged tires are hazardous to safe operation of crane.

6. For pick and carry operation, the boom, using the shortest practical boom length, must be centered over front of machine. When handling loads in the structural range with capacities close to maximum ratings, travel should be reduced to creep speed*. 2.5 m.p.h. capacities are permissible on main boom only, NOT on boom extension.

*Creep - not over 200 ft. of movement in any 30 minute period and not exceeding 1 mph.

7. With boom nose sheaves down (in lower position), single, 2-part or 4-part line may be used. With boom nose sheaves up and out (low profile position), single or 2-part line may be used, with maximum boom angle limited to 70°.

RATED LIFTING CAPACITIES IN POUNDS ON RUBBER

A6-829-100746A

PICK & CARRY AND STATIONARY - DEFINED ARC OVER FRONT

Radius in Feet	Main Boom Length in Feet										
	* 21 (22.8)	* 25 (26.4)	*30 (31.4)	*35 (36.4)	* 40 (41.4)	*45 (46.4)	*52 (53.4)				
6	19,350	19,350	19,350	19,350	**19,350						
8	15,500	15,500	15,500	15,500	15,500	**15,500					
10	12,800	12,800	12,800	12,800	12,800	12,800	**12,800				
12	10,800	10,800	10,800	10,800	10,800	10,800	10,800				
14	9,310	9,310	9,310	9,310	9,310	9,310	9,310				
16	8,100	8,100	8,100	8,100	8,100	8,100	8,100				
18		7,070	7,070	7,070	7,070	7,070	7,070				
20		6,150	6,150	6,150	6,150	6,150	6,150				
22			5,230	5,230	5,230	5,230	5,230				
24			4,500	4,500	4,500	4,500	4,500				
26			3,910	3,910	3,910	3,910	3,910				
28				3,430	3,430	3,430	3,430				
30				3,020	3,020	3,020	3,020				
32					2,680	2,680	2,680				
34					2,380	2,380	2,380				
36					2,120	2,120	2,120				
38						1,890	1,890				
40						1,690	1,690				
44							1,350				
48							1,070				
	Minimum	boom angle	(0°) for indi	cated length	n (no load)		0				
	Maximum	n boom leng	th (ft.) at 0°	boom angle	(no load)		52				
	I	Lifting Cap On Rubbe	acity at Zer r - Defined	o Degree E Arc and Pi	Boom Angle ck & Carry	9					
Boom			Main B	oom Length	in Feet						
Angle	*21 (22.8)	* 25 (26.4)	* 30 (31.4)	*35 (36.4)	*40 (41.4)	*45 (46.4)	*52 (53.4)				
0°	7,190	5,550 (21,3)	3,850 (26,3)	2,800 (31,3)	2,090 (36.3)	1,580 (41,3)	1,060				

in down position only.)

*Boom length varies between boom nose sheaves in down position (in bold), or up & out position (in parenthesis).

**Capacity based on maximum boom angle.

THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE. The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.





15 FT. EXTENSION RATED LIFTING CAPACITIES IN POUNDS

Radius			Main B	oom Length	in Feet		
in Feet	21	25	30	35	40	45	52
6	9,080	9,080	9,080	9,080			
8	9,080	9,080	9,080	9,080			
10	9,080	9,080	9,080	9,080	9,080	9,080	
12	8,370	9,080	9,080	9,080	9,080	9,080	9,080
14	7,510	8,150	8,780	9,080	9,080	9,080	9,080
16	6,810	7,400	8,060	8,410	8,630	8,980	9,080
18	6,220	6,770	7,440	7,810	8,050	8,430	8,480
20	5,630	6,240	6,920	7,500	7,770	7,940	8,030
22	5,110	5,690	6,430	7,030	7,320	7,510	7,630
24	4,680	5,210	5,820	6,180	6,460	7,120	7,270
26	4,310	4,800	5,490	5,840	6,320	6,760	6,760
28	4,000	4,450	5,090	5,730	5,980	5,980	5,980
30	3,720	4,140	4,740	5,330	5,330	5,330	5,330
32	3,470	3,870	4,430	4,780	4,780	4,780	4,780
34		3,630	4,160	4,310	4,310	4,310	4,310
36		3,410	3,900	3,900	3,900	3,900	3,900
38			3,540	3,540	3,540	3,540	3,540
40			3,230	3,230	3,230	3,230	3,230
45				2,590	2,590	2,590	2,590
50					2,090	2,090	2,090
55						1,690	1,690
60							1,370
	Minimum	boom angle	e (°) for india	cated length	(no load)		0
	Maximum	n boom leng	th (ft.) at 0°	boom angle	(no load)		52
		Lifting Cap On Ou	acity at Thr triggers Ful	ee Degree B Ily Extended	oom Angle - 360°		
Boom			Main B	oom Length	in Feet		
Angle	21	25	30	35	40	45	
3°	3,210 (33.4)	3,210 (37)	2,950 (42)	2,370 (47)	1,920 (52)	1,550 (57)	1,150 (64)

ON OUTRIGGERS FULLY EXTENDED - 360°

Note: () Ref. radii in feet.

A6-829-100754

NOTES:

- 1. All capacities above the bold line are based on structural strength of boom extension and do not exceed 85% of tipping loads on outriggers in accordance with SAE J765.
- 2. 15 ft. boom extension may be used for single line lifting service only.
- 3. WARNING: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning.
- 4. Capacities listed are with fully extended outriggers only.
- 5. When lifting loads the minimum allowable boom angle is 3°.

THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE. The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.



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		S	TATIONA	RY 360°			
Radius			Main B	oom Length	in Feet		
Feet	21	25	30	35	40	45	52
6	9,080	9,080	**9,080				
8	9,080	9,080	9,080	**9,080			
10	9,080	9,080	9,080	9,080	9,080		
12	7,970	7,970	7,970	7,910	7,860	7,860	
14	6,600	6,600	6,480	6,480	6,330	6,330	6,220
16	5,480	5,380	5,330	5,280	5,280	5,230	5,180
18	4,670	4,550	4,520	4,520	4,520	4,340	4,340
20	3,950	3,830	3,700	3,700	3,650	3,650	3,600
22	3,370	3,270	3,210	3,210	3,110	3,110	3,110
24	2,880	2,850	2,750	2,700	2,600	2,550	2,450
26	2,510	2,410	2,360	2,250	2,200	2,200	2,150
28	2,160	2,160	2,040	1,940	1,890	1,890	1,790
30	1,890	1,840	1,740	1,690	1,580	1,580	1,580
32	1,640	1,580	1,430	1,430	1,370	1,370	1,370
34		1,370	1,300	1,220	1,170	1,120	1,120
36		1,230	1,120	1,070	970	920	920
Minimum	boom angle (no l	(°) for indica oad)	ted length	31	38	44	50
Maximum	n boom lengti (no l	n (ft.) at 0° bo load)	oom angle		3	10	
		Lifting Cap Or	acity at Thr n Rubber St	ee Degree B ationary - 36	loom Angle 60°		
Boom			Main B	oom Length	in Feet		
Angle	21	25					
3°	1,510 (33.4)	1,130 (37)					

15 FT. EXTENSION RATED LIFTING CAPACITIES IN POUNDS ON RUBBER

Note: () Ref. radii in feet.. **This capacity based on maximum boom angle.

A6-829-100755A

permitted. 4. Capacities are applicable to machines equipped with 385/66R22.5 (J) Firestone T839 tires at 140 psi cold inflation pressure.
 5. Capacities are applicable only with machine on firm level surface.
 6. All rubber lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation

NOTES:

pressures. Damaged tires are hazardous to safe operation of crane. 7. WARNING: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning.

1. All capacities above the bold line are based on structural strength of boom extension and do not exceed 75% of tipping

3. Defined Arc - Over front includes 6° on either side of longitudinal centerline of machine. Pick and carry lifting NOT

8. When lifting loads the minimum allowable boom angle is 3°.

loads on rubber in accordance with SAE J765. 2. 15 ft. boom extension may be used for single line lifting service only.

15 FT. EXTENSION
RATED LIFTING CAPACITIES IN POUNDS ON RUBBER

STATIONARY - DEFINED ARC OVER FRONT

Radius	Main Boom Length in Feet								
Feet	21	25	30	35	40	45	52		
6	9,080	9,080	9,080	**9,080					
8	9,080	9,080	9,080	9,080					
10	9,080	9,080	9,080	9,080	9,080	**9,080			
12	8,370	9,080	9,080	9,080	9,080	9,080	**9,080		
14	7,510	8,150	8,780	9,080	9,080	9,080	9,080		
16	6,810	7,400	8,060	8,410	8,600	8,600	8,600		
18	6,220	6,770	7,440	7,600	7,600	7,600	7,600		
20	5,630	6,240	6,760	6,760	6,760	6,760	6,760		
22	5,110	5,690	5,910	5,910	5,910	5,910	5,910		
24	4,680	5,110	5,110	5,110	5,110	5,110	5,110		
26	4,310	4,450	4,450	4,450	4,450	4,450	4,450		
28	3,920	3,920	3,920	3,920	3,920	3,920	3,920		
30	3,470	3,470	3,470	3,470	3,470	3,470	3,470		
32	3,080	3,080	3,080	3,080	3,080	3,080	3,080		
34		2,750	2,750	2,750	2,750	2,750	2,750		
36		2,460	2,460	2,460	2,460	2,460	2,460		
38			2,210	2,210	2,210	2,210	2,210		
40			1,990	1,990	1,990	1,990	1,990		
45				1,530	1,530	1,530	1,530		
50					1,170	1,170	1,170		
55						880	880		
	Minimum	boom angle	e (°) for indi	cated length	(no load)		0		
	Maximum	n boom leng	th (ft.) at 0°	boom angle	(no load)		52		
		Lifting Cap On Ru	acity at Thr bber - Defin	ee Degree E led Arc Ove	soom Angle r Front				
Boom			Main B	oom Length	in Feet				
Angle	21	25	30	35	40	45			
3°	2,850 (33.4)	2,330 (37)	1,790 (42)	1,370 (47)	1,050 (52)	780 (57)			

**This capacity is based upon maximum boom angle. Note: () Ref. radii in feet.

NOTES: All capacities above the bold line are based on structural strength of boom extension and do not exceed 75% of tipping loads on rubber in accordance with SAE J765. 15 ft. boom extension may be used for single line lifting service only.

- 2. To it. Buotin extension may be used for single limit as entrope only.
 3. Defined Arc Over front includes 6° on either side of longitudinal centerline of machine. Pick and carry lifting NOT permitted.
 4. Capacities are applicable to machines equipped with 385/65R22.5 (J) Firestone T839 tires at 140 psi cold inflation pressure.
 5. Capacities are applicable to machines equipped with 385/65R22.5 (J) Firestone T839 tires at 140 psi cold inflation pressure.
 6. All rubber lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation pressures. Damaged tires are hazardous to safe operation of crane.
 7. WARNING: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning.
- 8. When lifting loads the minimum allowable boom angle is 3°.

THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE. The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.

A6-829-100756

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15 FT. OFFSETTABLE EXTENSION AT 0° OFFSET RATED LIFTING CAPACITIES IN POUNDS

ON OUTRIGGERS FULLY EXTENDED - 360°

Radius	Main Boom Length in Feet										
Feet	21	25	30	35	40	45	52				
6	9,080	9,080	*9,080								
8	9,080	9,080	9,080	9,080							
10	9,080	9,080	9,080	9,080	9,080	*9,080					
12	8,370	9,080	9,080	9,080	9,080	9,080	*9,080				
14	7,510	8,150	8,780	9,080	9,080	9,080	9,080				
16	6,810	7,400	8,060	8,410	8,630	8,980	9,080				
18	6,160	6,770	7,440	7,810	8,050	8,430	8,480				
20	5,550	6,180	6,920	7,500	7,770	7,940	8,030				
22	5,050	5,620	6,430	7,030	7,320	7,510	7,630				
24	4,620	5,150	5,820	6,180	6,460	7,120	7,270				
26	4,260	4,740	5,420	5,840	6,320	6,600	6,580				
28	3,940	4,390	5,020	5,650	5,830	5,830	5,830				
30	3,670	4,090	4,670	5,180	5,180	5,180	5,180				
32	3,420	3,820	4,370	4,630	4,630	4,630	4,630				
34		3,580	4,100	4,160	4,160	4,160	4,160				
36		3,370	3,750	3,750	3,750	3,750	3,750				
38			3,400	3,400	3,400	3,400	3,400				
40			3,080	3,080	3,080	3,080	3,080				
45				2,440	2,440	2,440	2,440				
50					1,940	1,940	1,940				
55						1,550	1,550				
60							1,220				
		Lifting Cap On Ou	acity at Thr triggers Ful	ee Degree E Ily Extended	Boom Angle I - 360°						
Boom			Main B	oom Length	in Feet						
Angle	21	25	30	35	40	45	52				
3°	3,210 (33.4)	3,210 (37)	2,800 (42)	2,230 (47)	1,770 (52)	1,410 (57)	1,010 (64)				

Note: () Ref. radii in feet. *This capacity based on maximum boom angle

15 FT. OFFSETTABLE EXTENSION AT 45° OFFSET RATED LIFTING CAPACITIES IN POUNDS

ON OUTRIGGERS FULLY EXTENDED - 360°
Main Boom Length in Feet

Radius	Main Boom Length in Feet									
Feet	21	25	30	35	40	45	52			
12	4,450	*4,500								
14	4,280	4,350	*4,420	*4,480						
16	4,140	4,210	4,290	4,360	*4,420	*4,460				
18	4,020	4,090	4,180	4,250	4,310	4,360	4,420			
20	3,920	3,990	4,080	4,150	4,220	4,270	4,330			
22	3,850	3,910	3,990	4,070	4,130	4,190	4,260			
24	3,800	3,850	3,920	3,990	4,060	4,120	4,180			
26	3,710	3,800	3,860	3,930	3,990	4,050	4,120			
28		3,730	3,820	3,870	3,930	3,990	4,060			
30			3,780	3,830	3,880	3,940	4,000			
32			3,710	3,800	3,840	3,890	3,950			
34				3,750	3,810	3,850	3,910			
36				2,930	3,750	3,750	3,750			
38					3,400	3,400	3,400			
40						3,080	3,080			
45							2,440			
	Li	ifting Capac Οn Οι	ity at Forty Itriggers Fu	Eight Degre	e Boom Ang I - 360°	gle				
Boom			Main B	oom Length	in Feet					
Angle	21	25	30	35	40	45	52			
48° **	3,710 (26.7)	3,710 (29.2)	3,630 (32.7)	2,810 (36.3)	2,180 (39.8)	1,680 (43.3)	1,130 (48.3)			
Note: () Ref.	radii in feet.					A6-	829-100749A			

Note: () Ref. radii in feet. *This capacity based on maximum boom angle. **Radii are with extension at horizontal.

A6-829-100748A

NOTES: 1. All capacities above the bold line are based on structural strength of boom extension and do not exceed 85% of tipping loads on All capacities above the bold line are based on structural strength of boom extension and do not exceed 85% of tipping loads on outriggers in accordance with SAE 1765.
 15 ft. offsettable boom extension may be used for single line lifting service only.
 WARNING: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning.
 Capacities listed are with fully extended 300° with 15 ft. offsettable extension installed at 0° offset:

 Minimum boom angle for 52 ft. main boom = 0°
 Maximum main boom length at 0° main boom angle = 52 ft.

 When lifting loads the minimum allowable boom angle is 3° at 0° offset.

NOTES: 1. All capacities above the bold line are based on structural strength of boom extension and do not exceed 85% of tipping loads on

All capacities above the bold line are based on structural strength of boom extension and do not exceed 85% of tipping loads on outriggers in accordance with SAE J765.
 15 ft. offsettable boom extension may be used for single line lifting service only.
 WARNING: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning.
 Capacities listed are with fully extended outriggers only.
 No load stability on outriggers fully extended 360° with 15 ft. offsettable extension installed at 45° offset:

 a. Minimum boom angle for 52 ft. main boom = 45°
 b. Maximum main boom length at 45° main boom angle = 52 ft.

 When lifting loads the minimum allowable boom angle is 48° at 45° offset.

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15 FT. OFFSETTABLE EXTENSION AT 0° OFFSET RATED LIFTING CAPACITIES IN POUNDS ON RUBBER STATIONADY 260

STATIONARY 360°									
Radius		N	lain Boom L	ength in Fe	et				
Feet	21	25	30	35	40	45	52		
6	9,080	9,080	*9,080						
8	9,080	9,080	9,080	*9,080					
10	9,080	9,080	9,080	9,080	9,080				
12	7,970	7,970	7,910	7,910	7,860	7,860			
14	6,360	6,360	6,360	6,360	6,220	6,220	*6,220		
16	5,280	5,280	5,180	5,180	5,180	5,180	5,180		
18	4,350	4,350	4,350	4,350	4,150	4,100	4,000		
20	3,770	3,720	3,620	3,500	3,450	3,450	3,330		
22	3,230	3,130	3,020	2,910	2,910	2,830	2,780		
24	2,730	2,680	2,570	2,520	2,470	2,370	2,370		
26	2,420	2,310	2,210	2,160	2,110	2,010	2,010		
28	2,060	2,010	1,960	1,840	1,730	1,730	1,730		
30	1,820	1,690	1,590	1,540	1,490	1,490	1,490		
32	1,580	1,470	1,350	1,300	1,240	1,240	1,240		
34		1,250	1,190	1,120	1,120	1,010	1,010		
36		1,100	1,040	920	920	810	810		
		Lifting Cap	acity at Thr On Rubb	ee Degree E oer - 360°	Boom Angle				
Boom			Main B	oom Length	in Feet				
Angle	21	25							
3°	1,430 (33.4)	1,090 (37)							
Note: () Ref	radii in feet					46-8	329-1007504		

Note: () Ref. radii in feet. *This capacity based on maximum boom angle

NOTES: 1. All capacities above the bold line are based on structural strength of boom extension and do not exceed 75% of tipping Index on rubber in accordance with SAE J765.
 15 ft. offsettable boom extension may be used for single line lifting service only.
 Defined Arc - Over front includes 6° on either side of longitudinal centerline of machine. Pick and carry lifting NOT

permitted.

Capacities are applicable to machines equipped with 385/65R22.5(J) Firestone T839 tires at 140 psi cold inflation pressure.
 Capacities are applicable only with machine on firm level surface.

6. All rubber lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation pressures. Damaged tires are hazardous to safe operation of crane.
7. WARNING: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping

with boom extension occurs rapidly and without advance warning. 8. No load stability on rubber 360° with 15 ft. offsettable extension installed at 0° offset: a. Minimum boom angle for 52 ft. main boom = 50°; for 45 ft. main boom = 43°; for 40 ft. main boom = 37°; for 35 ft. main boom = 29°

b. Maximum main boom length at 0° main boom angle = 30 ft.
9. When lifting loads the minimum allowable boom angle is 3° at 0° offset.

			STATIONA	RY 360°							
Radius	Main Boom Length in Feet										
Feet	21	25	30	35	40	45	52				
12	*4,450	*4,500									
14	4,280	4,350	*4,420	*4,480							
16	4,140	4,210	4,290	4,360	*4,420						
18	4,020	4,090	4,180	4,250	4,310	*4,360					
20	3,860	3,860	3,860	3,860	3,860	3,860	*3,860				
22	3,290	3,290	3,290	3,290	3,290	3,290	3,290				
24	2,820	2,820	2,820	2,820	2,820	2,820	2,820				
26	2,430	2,430	2,430	2,430	2,430	2,430	2,430				
28		2,100	2,100	2,100	2,100	2,100	2,100				
30			1,820	1,820	1,820	1,820	1,820				
32			1,580	1,580	1,580	1,580	1,580				
34				1,360	1,360	1,360	1,360				
36				1,110	1,110	1,110	1,110				
38					1,000	930	930				
	Li	ifting Capac	ity at Forty I On Rubb	Eight Degre ber - 360°	e Boom Ang	jle					
Boom			Main B	oom Length	in Feet						
Angle	21	25	30	35	40						
48° **	2,310 (26.7)	1,930 (29.2)	1,500 (32.7)	1,060 (36.3)	770 (39.8)						

15 FT. OFFSETTABLE EXTENSION AT 45° OFFSET RATED LIFTING CAPACITIES IN POUNDS ON RUBBER

Note: () Ref. radii in feet. *This capacity based on maximum boom angle ** Radii are with the extension at horizontal.

NOTES:

1. All capacities above the bold line are based on structural strength of boom extension and do not exceed 75% of tipping loads on rubber in accordance with SAE J765. 2. 15 ft. offsettable boom extension may be used for single line lifting service only.

3. Defined Arc - Over front includes 6° on either side of longitudinal centerline of machine. Pick and carry lifting NOT Capacities are applicable to machines equipped with 385/65R22.5 (J) Firestone T839 tires at 140 psicold inflation pressure.

5. Capacities are applicable only with machine on firm level surface

All rubber lifting depends only with instantie on initiative statute.
 All rubber lifting depends on propertie inflation, capacity and condition. Capacities must be reduced for lower tire inflation pressures. Damaged tires are hazardous to safe operation of crane.
 WARNING: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping

WARNING - Operation of this machine with nearbine todds that the capacities insteads with boom extension occurs rapidly and without advance warning.
 No load stability on rubber 360° with 15 ft. offsettable extension installed at 45° offset:

 a. Minimum boom angle for 52 ft. main boom = 56°
 b. Maximum main boom length at 45° main boom angle = 45 ft.
 9. When lifting loads the minimum allowable boom angle is 48° at 45° offset.

THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE. The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.

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A6-829-100751A

15 FT. OFFSETTABLE EXTENSION AT 0° OFFSET RATED LIFTING CAPACITIES IN POUNDS ON RUBBER

STATIONARY	- DEFINED ARC OVER FRONT

Radius			Main B	oom Length	in Feet		
Feet	21	25	30	35	40	45	52
6	9,080	9,080	*9,080				
8	9,080	9,080	9,080	9,080			
10	9,080	9,080	9,080	9,080	9,080		
12	8,370	9,080	9,080	9,080	9,080	9,080	*9,080
14	7,510	8,150	8,780	9,080	9,080	9,080	9,080
16	6,810	7,400	8,060	8,170	8,170	8,170	8,170
18	6,160	6,770	7,330	7,330	7,330	7,330	7,330
20	5,550	6,180	6,590	6,590	6,590	6,590	6,590
22	5,050	5,620	5,720	5,720	5,720	5,720	5,720
24	4,620	4,920	4,920	4,920	4,920	4,920	4,920
26	4,260	4,280	4,280	4,280	4,280	4,280	4,280
28	3,750	3,750	3,750	3,750	3,750	3,750	3,750
30	3,310	3,310	3,310	3,310	3,310	3,310	3,310
32	2,930	2,930	2,930	2,930	2,930	2,930	2,930
34		2,600	2,600	2,600	2,600	2,600	2,600
36		2,320	2,320	2,320	2,320	2,320	2,320
38			2,070	2,070	2,070	2,070	2,070
40			1,850	1,850	1,850	1,850	1,850
45				1,400	1,400	1,400	1,400
50					1,040	1,040	1,040
		Lifting Cap On Ru	acity at Thr bber - Defin	ee Degree E led Arc Ove	Boom Angle r Front		
Boom			Main B	oom Length	in Feet		
Angle	21	25	30	35	40	45	
3°	2,700 (33.4)	2,190 (37)	1,650 (42)	1,240 (47)	920 (52)	620 (57)	

Note: () Ref. radii in feet. *This capacity based on maximum boom angle

NOTES:

All capacities above the bold line are based on structural strength of boom extension and do not exceed 75% of tipping loads on rubber in accordance with SAE J765.

2. 15 ft. offsettable boom extension may be used for single line lifting service only

3. Defined Arc - Over front includes 6° on either side of longitudinal centerline of machine. Pick and carry lifting NOT permitted. 4. Capacities are applicable to machines equipped with 385/65R22.5 (J) Firestone T839 tires at 140 psi cold inflation pressure.

5. Capacities are applicable only with machine on firm level surface. 6. All rubber lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation pressures. Damaged tires are hazardous to safe operation of crane.

7. WARNING: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning.

8. No load stability on rubber (defined arc) with 15 ft. offsettable extension installed at 0° offset: a. Minimum boom angle for 52 ft. main boom = 21°

- b. Maximum main boom length at 0° main boom angle = 45 ft.
 9. When lifting loads the minimum allowable boom angle is 3° at 0° offset.

15 FT. OFFSETTABLE EXTENSION AT 45° OFFSET
RATED LIFTING CAPACITIES IN POUNDS ON RUBBER
STATIONARY - DEFINED ARC OVER FRONT

Radius			Main B	oom Length	in Feet		
Feet	21	25	30	35	40	45	52
12	4,450	*4,500					
14	4,280	4,350	*4,420	*4,480			
16	4,140	4,210	4,290	4,360	*4,420		
18	4,020	4,090	4,180	4,250	4,310	4,360	
20	3,920	3,990	4,080	4,150	4,220	4,270	4,330
22	3,850	3,910	3,990	4,070	4,130	4,190	4,260
24	3,800	3,850	3,920	3,990	4,060	4,120	4,180
26	3,710	3,800	3,860	3,930	3,990	4,050	4,120
28		3,730	3,750	3,750	3,750	3,750	3,750
30			3,310	3,310	3,310	3,310	3,310
32			2,930	2,930	2,930	2,930	2,930
34				2,600	2,600	2,600	2,600
36				2,320	2,320	2,320	2,320
38					2,070	2,070	2,070
40						1,850	1,850
45							1,400
	L	ifting Capac On Ru	ity at Forty I Ibber - Defin	Eight Degre ned Arc Ove	e Boom Ang r Front	le	
Boom			Main B	oom Length	in Feet		
Angle	04	05		05	40	45	50

Boom	Main Boom Length in Feet						
Angle	21	25	30	35	40	45	52
48° **	3,710 (26.7)	3,480 (29.2)	2,810 (32.7)	2,280 (36.3)	1,870 (39.8)	1,540 (43.3)	1,130 (48.3)

Note: () Ref. radii in feet. * This capacity based on maximum boom angle ** Radii are with the extension at horizontal.

NOTES:

I. All capacities above the bold line are based on structural strength of boom extension and do not exceed 75% of tipping loads on rubber in accordance with SAE J765.
 I. 15 ft. offsettable boom extension may be used for single line lifting service only.
 Defined Arc - Over front includes 6° on either side of longitudinal centerline of machine. Pick and carry lifting NOT

Capacities are applicable to machines equipped with 385/65R22.5 (J) Firestone T839 tires at 140 psi cold inflation pressure.

Capacities are applicable only with machine on firm level surface.
 All rubber lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation

pressures. Damaged tires are hazardous to safe operation of crane.

WARNING : Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning.
 No load stability on rubber (defined arc) with 15 ft. offsettable extension installed at 45° offset:

a. Minimum boom angle for 52 ft. main boom = 45°
b. Maximum main boom length at 45° main boom angle = 52 ft.
9. When lifting loads the minimum allowable boom angle is 48° at 45° offset.

THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE. The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.

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This information is for reference use only. Operators manual should be consulted and adhered to. Please contact Bigge Crane and Rigging Co. at 888-337-BIGGE or email info@bigge.com for further information. BİGGE

BİGGE

LOAD DISTRIBUTION CHART FOR CARRY DECK



Maximum Allowable Uniformly Distributed Load

AREA 1	
43.2 sq. ft. / 4.01 m ²	13,195 lb. / 5,985 kg
AREA 2	
23.1 sq. ft. / 2.15 m ²	6,805 lb. / 3,087 kg
<u>TOTAL</u>	
66.3 sq. ft. / 6.16 m ²	20,000 lb. / 9,072 kg

- 1. Maximum travel speed with any or all loads 2.5 MPH (4.0 km/h)
- 2. Loads to be transported on smooth level firm surfaces only.
- 3. Boom must be retracted and in center forward position.
- 4. Any combination or total of areas 1 & 2 may be used.
- 5. Lifting is not permitted when carry deck is loaded except for loading and unloading carry deck.
- 6. Rated pick and carry loads may be transported on deck area 1 provided the load is cribbed directly on the frame rails.

HOISTS	CABLE SPECS.	PERMISSIBLE	NOMINAL CABLE LENGTH
Main Model PD12C	5/8 in. (16 mm) 18x19 Class Rotation Resistant Min. Breaking Strength 45,400 lbs.	9,080 lbs.	250 ft. (40' boom) 310 ft. (52' boom)
Main Model PD12C	5/8 in. (16 mm) 6x37 Class EIPS, IWRC Special Flexible Min. Breaking Strength 41,200 lbs.	9,080 lbs.	250 ft. (40' boom) 310 ft. (52' boom)

LINE PULLS AND REEVING INFORMATION

WEIGHT REDUCTIONS FOR LOAD HANDLING DEVICES

40 FT. MA	IN BOOM
15' FIXED (NON-	OFFSETTABLE)
Erected	870 lb.
Stowed	85 lb.
15' OFFSI	ETTABLE
Erected	1420 lb.
Stowed	260 lb.
52 FT. MA	IN BOOM
15' FIXED (NON-	OFFSETTABLE)
15' FIXED (NON- Erected	OFFSETTABLE) 870 lb.
15' FIXED (NON- Erected Stowed	OFFSETTABLE) 870 lb. 160 lb.
15' FIXED (NON- Erected Stowed 15' OFFSI	OFFSETTABLE) 870 lb. 160 lb. ETTABLE
15' FIXED (NON- Erected Stowed 15' OFFSI Erected	OFFSETTABLE) 870 lb. 160 lb. ETTABLE 1420 lb.

HOOKBLOCKS and HEADAG	CHE BALLS:
16.5 ton (15 MT) 2 Sheave (w/o quick ree	ve) 240 lb.
16.5 ton (15 MT), 2 Sheave (w/quick ree	ve) 241 lb.
11 ton (10 MT), 1 Sheave (w/quick reeve	e) 204 lb.
5 ton Overhaul Ball (w/ quick reeve)	148 lb.

+Refer to rating plate for actual weight.

When lifting over swingaway and/or jib combinations, deduct total weight of all load handling devices reeved over main boom nose directly from swingaway or jib capacity.

NOTE: All load handling devices and boom attachments are considered part of the load and suitable allowances MUST BE MADE for their combined weights. Weights are for Grove furnished equipment.

THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE. The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.

POVE VRAA15/VRAA15VI





GROVE

Grove Worldwide - World Headquarters

Western Hemisphere, Asia/Pacific 1565 Buchanan Trail East P.O. Box 21 Shady Grove, Pennsylvania 17256-0021, USA Tel: [Int + 1] (717) 597-8121 Fax: [Int + 1] (717) 597-4062

Grove Europe Limited*

Europe, Africa, Middle East (Sales & Marketing) 1 Emperor Way Doxford International Business Park Sunderland SR3 3XR, England Tel: [Int + 44] (191) 515-7253 Fax: [Int + 44] (191) 564-0442

Grove Europe Limited* UK & EIRE (Sales & Service) Telford Road, Bicester Oxfordshire OX6 0TZ, England Tel: [Int + 44] (1869) 878-890 Fax: [Int + 44] (1869) 878-891

Deutsche Grove GmbH Germany (Sales & Service) Helmholtzstrasse 12, Postfach 5026 D-40750 Langenfeld, Germany Tel: [Int + 49] (2173) 8909-0 Fax: [Int + 49] (2173) 8909-30

Deutsche Grove GmbH Wilhelmshaven Works Industriegelande West, Postfach 1853 D-26358 Wilhelmshaven, Germany Tel: [Int + 49] (4421) 294-0 Fax: [Int + 49] (4421) 294-301

Grove France SAS France (Sales & Service) 16, Chaussèe Jules-Cèsar, 95520 OSNY B.P. 203, 95523 Cergy Pontoise France Tel: [Int + 33] (1) 303-13150 Fax: [Int + 33] (1) 303-86085

Grove Asia/Pacific - Representative Office

Asia/Pacific, Near East 171 Chin Swee Road #10-09 San Centre Singapore 16987 Tel: [Int + 65] 536-6112 Fax: [Int + 65] 536-6119

Grove China - Representative Office

Room 713, Towercrest Plaza No. 3 Mai Zi Dian West Road Chao Yang District Beijing, China 100016 Tel: [Int + 86] (10) 64 67 16 90 Fax: [Int + 86] (10) 64 67 16 91

Grove Middle East

P.O. Box 290 Dubai, United Arab Emirates Tel: [Int + 971] (4) 3484478 Fax: [Int + 971] (4) 3484478

Lifetime Customer Support

Western Hemisphere, Asia/Pacific 1086 Wayne Avenue Chambersburg, Pennsylvania 17201 USA Tel: [Int + 1] (717) 263-5100 Fax: [Int + 1] (717) 267-0404

Europe, Africa, Middle East Grove Europe Limited' 1 Emperor Way Doxford International Business Park Sunderland SR3 3XR, England Tel: [Int + 44] (191) 565-6281 Parts Fax: [Int + 44] (191) 515-7475 Service Fax: [Int + 44] (191) 515-7340

*Grove Europe Limited, Registered in England, Number 1845128.

http://www.groveworldwide.com

Distributed By:

Bigge Crane and Rigging Co.

10700 Bigge Avenue San Leandro, CA 94577 Phone: (888) 337-BIGGE or (510) 638-8100 Fax: (510) 639-4053 Email: info@bigge.com Web site: www.bigge.com

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INDUSTRIAL CRANE





Superstructure Specifications

Boom

17 ft. - 40 ft. (5.1 m - 12.2 m) three-section full power boom. Maximum tip height: 47 ft. (14.4 m). Speeds: 32 seconds (ext.); 19 seconds (retract).

*Optional Boom

21 ft. - 52 ft. (6.5 m - 15.6 m) three-section full power boom. Maximum tip height: 59 ft. (18.0 m). Speeds: 43 seconds (ext.); 25 seconds (retract).

*Fixed Boom Extension (non-offsettable)

15 ft. (4.6 m) swingaway extension w/single metallic sheave in point. Stows alongside base boom section for travel. Extends tip heights to 62 ft. (18.9 m) or 74 ft. (22.5 m) with the 40 ft. (12.2 m) and 52 ft. (15.6 m) booms respectively.

*Offsettable Boom Extension

15 ft. (4.6 m) swingaway extension w/single metallic sheave in point. Stows alongside base boom section for travel. Extends tip heights to 62 ft. (18.9 m) or 74 ft. (22.5 m) with the 40 ft. (12.2 m) and 52 ft. (15.6 m) booms respectively. Can be offset at 0° or 45° to increase up and over reach.

Boom Nose

Two (2) position low profile and quick reeve design with two metallic sheaves mounted on tapered roller bearings and quick removable pin-type rope guards. Head pivots forward (up) to the low profile position (1-2 parts of line only & max 70° boom elevation) for minimizing head space requirements or rearward (down) to the conventional position for maximum lifts that exceed 2 parts of line reeving or approximately 18,000 lbs. (8165 kg).

Boom Elevation

Twin double acting hydraulic cylinders with integral holding valves provide elevation from 0° to 80°. Mechanical boom angle indicator. Speeds: 20 seconds (ext.) 14 seconds (retract).

Anti-Two Block Device - The standard low profile type anti-two block device, when activated, provides an audible-visual warning to the crane operator and disengages all crane functions whose movement can cause two-blocking.

*Rated Capacity Limiter (RCL)

A simple, effective and easy to use overload protection system in conjunction with a low profile type anti-two block (A2B) device assists the operator in the efficient operation of the unit. The RCL system constantly monitors actual lifting conditions versus allowable capacity ratings to assist in preventing an overload condition. It provides the operator with a visual pre-warning at approximately 90% of the rated capacity and an audible-visual warning in combination with automatic lockout at approximately 100% of rated capacity.

Swing

Ball bearing swing circle with 360° continuous rotation. Hydraulic motor driven worm and gear reducer. Maximum speed: 2.0 RPM.

Counterweight

4,300 lbs. (1950 kg) w/40 ft. (12.2 m) boom; 4,800 lbs. (2177 kg) w/52 ft. (15.6 m) boom; bolted to the turntable.

Hydraulic System

Three (3) section main gear pumps driven off torque converter through PTO.

Combined capacity: 75 GPM (285 LPM).

Maximum system operating pressure: 3,500 psi (241 bar).

Three valve banks mounted on top of dash panel with direct mechanical linkage low effort lever controls.

Return line type filter with full flow by-pass protection and service indicator. 10 micron rated replaceable cartridges.

54 gallon (205 L) reservoir with sight level gauge and steel plate to guard against side impact damage.

*Remote-mounted oil cooler with thermostatically controlled electric motor driven fan.

System pressure and flow test ports with quick release type fittings for each circuit.

HOIST SPECIFICATIONS - Model HP12-13G

Planetary reduction with automatic spring applied multi-wet-disc brake and grooved hoist drum. *Cable follower available.

Drum Dim. (Dia. x Lg.)	10.63" x 13.4" (270 mm x 341 mm)
Maximum Single Line Pull:	10,930 lbs. (4958 kg)
Maximum Single Line Spee	d: 134 - 178 FPM (41 - 54 m/min)
Maximum Permissible Singl Standard Rope 5/8" (16 m (6 x 37 Class):	e Line Pull: nm) 9,080 lbs. (3.5:1 FOS) (4119 kg)
*Optional Rope 5/8" (16 n (18 x 19 Class):	nm) 9,080 lbs. (5:1 FOS) (4119 kg)
Rope Length (Std.):	250 ft. (76.2 m) w/40 ft. (12.2 m) boom 310 ft. (94.5 m) w/52 ft. (15.6 m) boom
Maximum Rope Stowage:	374 ft. of 5/8" (114 m of 16 mm)
Usable:	269 ft. of 5/8" (82 m of 16 mm)

*Denotes optional equipment

Chassis Specifications

Frame

High strength alloy steel construction with integral outrigger housings; front/rear lifting, towing and tie down lugs and recessed lifting points in all four corners of deck top. Carry deck constructed of 1/4" (6 mm) thick plate steel w/surface area of 66 sq. ft. (6.1 m²) and anti-skid deck treatment.

Outriggers

Front and rear oblique type beams at all four corners with integral holding valves. Outrigger pads form an integral part of the beam and have a surface area of 103 sq. in. (665 cm²). Maximum outrigger pad load: 26,539 lbs. (12 038 kg).

Outrigger Controls, Synchronized

Controls are located on dash panel and operate beams in pairs from side to side. Two hand sequence minimizes unintentional actuation. Sight leveling bubbles located inside operator's compartment. *Independent control of each individual beam is available.

Engine, Dual Fuel (Gas/LPG)

General Motors 4.3 L, six cylinder, dual fuel (LPG/gas) engine, 115 bhp (85 kW) (Gross) @ 2,500 RPM. 100 amp alternator. Maximum torque: 275 ft. lbs. (373 Nm) @ 2,200 RPM.

*Engine, Diesel

Cummins 4BT3.9 L turbo-charged diesel, four cylinder, 110 bhp (82 kW) (Gross) @ 2,500 RPM. Maximum torque: 293 ft. lbs. (397 Nm) @ 1,500 RPM.

Operator's Control Station

The frame mounted, open air style control station with overhead canopy includes all crane function and driving controls. Other standard equipment includes a durable nylon cushion seat with lap belt; hourmeter; sight level bubble and fire extinguisher. The dash panel includes engine oil pressure gauge; engine water temperature gauge; voltmeter; all critical engine monitoring instruments; engine/transmission A/V distress system; outrigger controls; *A2B warning indicators; parking/emergency brake toggle switch with warning light and hooded panel light. The dash panel also includes an RCL panel and RCL warning indicators when the machine is equipped with the *RCL. All control valves are mounted on top of dash area for ease of operation and increased leg room.

Overhead Canopy

Tubular steel construction with steel mesh covering on top and right side grill type guard. Not available with enclosed cab option.

*Cab, Enclosed

Fully enclosed galvannealed sheet metal structure replaces standard overhead canopy. Includes hot water forced air heater/defroster, safety glass throughout, hinged removable door, sliding left and right side glass for cross ventilation, door lock, electric windshield wiper/ washer, fixed skylight glass, circulating air fan, rear deck storage shelf area behind operator's seat.

Fuel Tank Capacity

46 gallon (175 L) all steel construction w/steel plate to guard against side impact damage.

Electrical System

One 12 V - maintenance free battery. 875 CCA. Includes standard 12 V remote slave receptacle wired directly to the starter to facilitate jump starting. Automotive type color coded fuses, number coded wiring and water tight connectors.

Drive

4 x 2 - Front axle drive only with planetary hubs and limited slip differential. $^{*}4$ x 4 (YB4415XT) - Front and rear drive/steer axles with planetary hubs and limited slip differentials.

Steering

All wheel ($\overline{4}$ wheel), full hydraulic power via steering wheel permits two modes of operation: 2 wheel (rear only) or four-wheel coordinated. Inside dash-mounted selector switch to select steering mode.

Transmission

Remote mounted Clark 3 speed forward and reverse full powershift w/engine mounted torque converter and stalk type shift control mounted to the steering column. Controls permit quick and easy shuttle control between forward and reverse travel.

Axles

Front: Planetary drive/steer with internal multi-wet-disc brakes and limited slip differential.
Rear: (4 x 2) Fabricated steer axle with internal wet disc brakes. (4x4 drive) Planetary drive/steer with internal wet disc brakes and limited slip differential.

Tires

Standard 385/65R22.5-18 PR tubeless radial traction tread.

Suspension

Front: Mounted rigid to frame.

Rear: Mounted on rubber blocks to permit oscillation for operation on semiunimproved terrain.

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 mounted warning light. Parking brake acts on both front wheels of 2 wheel drive models and on all 4 wheels of *4 wheel drive (XT) models.

Lights

Recessed mounted behind grill type frame cutouts and includes head, tail, turn signals, brake and 4-way hazard warning lights.

Maximum Speed

19 MPH (30 kph)

Gradeability (Theoretical)

75% (Based on 27,000 lbs. [12 247 kg] GVW).

*Tow Winch

Hydraulic winch mounted behind the front bumper area and operated from within the operator's compartment using the Swing/Tow winch control lever via selector switch. Hydraulic powered unit has a bare drum pull of 6,000 lbs. (2722 kg) at 48 ft/min. (14.6 m/min.) single line speed. Includes 100 ft. (30.5 m) length of 3/8" diameter 6 x 25 EIPS IWRC wire rope, hook and thimble, 4 way roller guide and winch mounted drum release lever to permit free spooling the rope from the drum. Winch is not designed for any type of vertical lifting.

Miscellaneous Standard Equipment

Hookblock tiedown sling, electronic combination two-tone back-up and outrigger motion alarm, front and rear running lights, tool stowage well, 15 ton (15 MT) capacity two sheave quick reeve hookblock, powertrain audio-visual distress warning system, 12 V remote slave receptacle for jump starting, R/S convex rearview mirror.

*Optional Equipment

 Worklight package - consists of three 12V, ball mounted, manually adjustable worklights (2-cab/canopy mounted and 1 boom mounted)

- * 360° amber flashing light wired to ignition switch
- * Ether injection & block heater cold weather starting kit (less canister) for diesel only
- * Engine block heater only (Dual Fuel Engine)
- * Pintle hooks front/rear
- * Carry deck posts
- * Spark arrestor muffler(s) (Dual Fuel only)
- * Sound suppression package for under 90 dBa cab noise levels
- * Dual rearview west coast mirrors
- * Hydraulic system oil cooler
- * Quick Reeve Overhaul weight with 5 ton (4.5 MT) hook
- * Engine tachometer, dash mounted * Deluxe operator's fabric seat w/spring suspension and dual armrests

*Denotes optional equipment

RATED LIFTING CAPACITIES IN POUNDS ON OUTRIGGERS FULLY EXTENDED - 360°

Radius		Μ	lain Boom L	ength in Fe	et	
Feet	* 17 (18.4)	* 20 (21.4)	* 25 (26.4)	* 30 (31.4)	* 35 (36.4)	* 40 (41.4)
6	30,000	28,950	28,200	27,850	27,650	
8	28,050	28,100	28,150	27,800	26,400	23,750
10	23,000	23,100	23,150	23,200	22,450	20,650
12	18,100	18,250	18,350	18,450	18,500	17,550
14		14,750	14,850	14,900	14,950	14,950
16		12,300	12,450	12,450	12,500	12,500
18			10,600	10,650	10,700	10,700
20			9,070	9,070	9,070	9,070
22				7,760	7,760	7,760
24				6,740	6,740	6,740
26				5,930	5,930	5,930
28					5,260	5,260
30					4,710	4,710
32						4,240
34						3,840
36						3,490
Mir	imum boom	angle (°) fo	r indicated	ength (no lo	ad)	0
Maxim	um boom lei	ngth (ft.) at 0) degree bo	om angle (n	o load)	40
	Liftir	ng Capacity On Outrigge	at Zero Deg ers Fully Ext	ree Boom A tended 360°	ngle	
Boom		Μ	lain Boom L	ength in Fe	et	
Angle	* 17 (18.4)	* 20 (21.4)	* 25 (26.4)	* 30 (31.4)	* 35 (36.4)	* 40 (41.4)
0°	9,080 (13.3)	8,100 (16.3)	5,940 (21.3)	4,600 (26.3)	3,720 (31.3)	3,070 (36.3)

17 FT 40 FT. BOO

Note: () Reference radii in feet. (Applicable to boom nose sheaves in down position only.)

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*Boom length varies between boom nose sheaves in down position (in bold), or up & out position (in parenthesis).

- 1. Capacities do not exceed 85% of tipping loads as determined by test in accordance with SAE J765.
- 2. Capacities appearing above the bold line are based on structural strength and tipping should not be relied upon as a capacity limitation.
- 3. With boom nose sheaves down (in lower position), single, 2-part or 4-part line may be used. With boom nose sheaves up and out (low profile position), single or 2-part line may be used, with maximum boom angle limited to 70°.

RATED LIFTING CAPACITIES IN POUNDS ON RUBBER

STATIONARY - 360°

Desta							
Radius		N	lain Boom L	ength in Fe	et		
Feet	* 17 (18.4)	* 20 (21.4)	* 25 (26.4)	* 30 (31.4)	*35 (36.4)	* 40 (41.4)	
6	14,700	14,700	14,700	14,700	14,700		
8	11,500	11,500	11,500	11,500	11,500	11,500	
10	8,930	8,930	9,050	9,050	9,050	9,050	
12	6,900	7,020	7,020	7,020	7,020	7,020	
14		5,400	5,540	5,620	5,680	5,780	
16		4,320	4,510	4,540	4,600	4,600	
18			3,600	3,740	3,850	3,850	
20			2,990	3,120	3,150	3,200	
22				2,590	2,650	2,650	
24				2,110	2,170	2,200	
26				1,740	1,820	1,820	
28					1,440	1,560	
30					1,280	1,280	
32						1,060	
34						860	
36						770	
Mir	nimum boom	n angle (°) fo	or indicated	length (no lo	ad)	0	
Maxim	um boom le	ngth (ft.) at () degree bo	om angle (n	o load)	40	
	Liftir	ng Capacity O	at Zero Deg n Rubber 36	iree Boom A 60°	ngle		
Boom		N	lain Boom L	ength in Fe	et		
Angle	* 17 (18.4)	* 20 (21.4)	* 25 (26.4)	*30 (31.4)	*35 (36.4)	* 40 (41.4)	
0°	5,990 (13.3)	4,230 (16.3)	2,430 (21.3)	1,680 (26.3)	1,130 (31.3)	770 (36.3)	
Note: () Refe	erence radii in	feet. (Applicat	ole to boom no	se sheaves	10.0	000 4000000	

1. Capacities are in pounds and do not exceed 75% of tipping loads as determined by test in accordance with SAE J765.

2. Capacities are applicable to machines equipped with 385/65R22.5 (J) Firestone T839 tires at 140 psi cold inflation pressure.

- 3. Defined Arc Over front includes 6° on either side of longitudinal centerline of machine.
- 4. Capacities are applicable only with machine on firm level surface.
- 5. All rubberlifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation pressures. Damaged tires are hazardous to safe operation of crane.
- 6. For pick and carry operation, the boom, using the shortest practical boom length, must be centered over front of machine. When handling loads in the structural range with capacities close to maximum ratings, travel should be reduced to creep speed*. 2.5 m.p.h. capacities are permissible on main boom only, NOT on boom extension.
 *Creep-not over 200 ft. of movement in any 30 minute period and not exceeding 1 mph.
- Note: () Keterence radii in feet. (Applicable to boom nose sneaves in down position only.) A6-829-100222B

*Boom length varies between boom nose sheaves in down position (in bold), or up & out position (in parenthesis).

 With boom rose sheaves down (in lower position), single, 2-partor 4-partitine may be used. With boom nose sheaves up and out (low profile position), single or 2-part line may be used, with maximum boom angle limited to 70°.

Radius	Main Boom Length in Feet							
Feet	* 17 (18.4)	* 20 (21.4)	* 25 (26.4)	* 30 (31.4)	*35 (36.4)	*40 (41.4)		
6	18,700	18,700	18,700	18,700	18,700			
8	15,050	15,050	15,050	15,050	15,050	15,050		
10	12,500	12,500	12,500	12,500	12,500	12,500		
12	10,600	10,600	10,600	10,600	10,600	10,600		
14		9,190	9,190	9,190	9,190	9,190		
16		8,040	8,040	8,040	8,040	8,040		
18			6,870	6,870	6,870	6,870		
20			5,760	5,760	5,760	5,760		
22				4,910	4,910	4,910		
24				4,250	4,250	4,250		
26				3,620	3,710	3,710		
28					3,270	3,270		
30					2,800	2,880		
32						2,580		
34		-				2,110		
36						1,620		
Mir	nimum boom	n angle (°) fo	or indicated	length (no lo	ad)	0		
Maxim	um boom le	ngth (ft.) at () degree bo	om angle (n	o load)	40		
	Liftir On	ng Capacity Rubber - De	at Zero Deg efined Arc a	ree Boom A nd Pick & Ca	ingle arry			
Boom		N	lain Boom L	ength in Fe	et			
Angle	* 17 (18.4)	* 20 (21.4)	* 25 (26.4)	* 30 (31.4)	*35 (36.4)	* 40 (41.4)		
0°	9,690 (13.3)	7,920 (16.3)	5,210 (21.3)	3,610 (26.3)	2,630 (31.3)	1,520 (36.3)		

PICK & CARRY AND STATIONARY - DEFINED ARC OVER FRONT

Note: () Reference radii in feet. (Applicable to boom nose sheaves A6-829-10022 in down position only.)

*Boom length varies between boom nose sheaves in down position (in bold), or up & out position (in parenthesis).

15 FT. EXTENSION RATED LIFTING CAPACITIES IN POUNDS

Radius	Main Boom Length in Feet							
Feet	17	20	25	30	35	40		
6	9,080	9,080	9,080	9,080				
8	9,080	9,080	9,080	9,080	9,080	9,080		
10	8,850	9,080	9,080	9,080	9,080	9,080		
12	7,860	8,450	9,080	9,080	9,080	9,080		
14	7,060	7,610	8,480	9,080	9,080	9,080		
16	6,410	6,590	7,730	9,080	9,080	8,900		
18	5,870	6,340	7,100	8,390	8,330	8,090		
20	5,410	5,850	6,570	7,750	7,640	7,420		
22	5,020	5,440	6,110	7,260	7,040	6,840		
24	4,680	5,070	5,710	6,720	6,530	6,340		
26	4,380	4,760	5,360	6,140	6,070	5,900		
28	3,740	4,380	5,050	5,480	5,480	5,480		
30		4,190	4,770	4,930	4,930	4,930		
32			4,410	4,470	4,470	4,470		
34			3,790	4,070	4,070	4,070		
36			2,730	3,730	3,730	3,730		
38				3,420	3,420	3,420		
40				3,160	3,160	3,160		
45					2,610	2,610		
50						2,190		
	Liftin	g Capacity a On Outrigge	at Three Deg rs Fully Exte	gree Boom / ended - 360	Angle °			
Boom		N	lain Boom L	ength in Fe	et			
Angle	17	20	25	30	35	40		
3°	2,700 (29)	2,450 (32)	1,990 (37)	1,560 (42)	1,240 (47)	1,000 (52)		

ON OUTRIGGERS FULLY EXTENDED - 360°

Note: () Ref. radii in feet.

A6-829-100224D

NOTES:

- 1. All capacities above the bold line are based on structural strength of boom extension and do not exceed 85% of tipping loads on outriggers in accordance with SAE J765.
- 2. 15 ft. boom extension may be used for single line lifting service only.
- 3. **WARNING:** Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning.
- 4. Capacities listed are with fully extended outriggers only.
- 5. No load stability on outriggers fully extended 360° with 15 ft. extension installed:
 - a. Minimum boom angle for 40 ft. main boom = 0°
 - b. Maximum main boom length at 0° main boom angle = 40 ft.
- 6. When lifting loads the minimum allowable boom angle is 3°.

15 FT. EXTENSION RATED LIFTING CAPACITIES IN POUNDS ON RUBBER

STATIONARY 360°

Radius		N	lain Boom L	ength in Fe.	et	
Feet	17	20	25	30	35	40
6	8,070	8,070	8,070	**8,070		
8	8,070	8,070	8,070	8,070	**7,550	
10	8,070	8,070	8,070	8,070	7,550	7,040
12	7,850	7,840	7,710	7,710	7,550	7,040
14	6,400	6,300	6,200	6,000	5,890	5,890
16	5,250	5,130	5,030	5,030	5,030	5,030
18	4,470	4,420	4,420	4,420	4,310	4,210
20	3,790	3,790	3,650	3,650	3,620	3,590
22	3,260	3,260	3,120	3,120	3,010	3,010
24	2,820	2,760	2,640	2,610	2,610	2,570
26	2,460	2,430	2,340	2,300	2,300	2,300
28	2,170	2,100	2,040	1,980	1,980	1,980
30		1,880	1,820	1,720	1,690	1,690
32			1,560	1,530	1,470	1,440
34			1,390	1,330	1,250	1,250
36			1,150	1,150	1,060	1,060
38				960	880	880
40				830	700	700
45					520	520
	Liftin	g Capacity a On Rub	at Three Deg ber Stationa	gree Boom ry - 360°	Angle	
Boom		N	lain Boom L	ength in Fe.	et	
Angle	17	20	25	30	35	
3°	2,110 (29)	1,760 (32)	1,100 (37)	750 (42)	490 (47)	
** This capac Note: () Ref.	ity based on r radii in feet.	naximum boor	m angle.		A6-8	29-100225D

NOTES:

1. All capacities above the bold line are based on structural strength of boom extension and do not exceed 75% of tipping loads on rubber in accordance with SAE J765.

2. 15 ft. boom extension may be used for single line lifting service only.

3. Defined Arc - Over front includes 6° on either side of longitudinal centerline of machine. Pick and carry lifting NOT permitted.

4. Capacities are applicable to machines equipped with 385/65R22.5 (J) Firestone T839 tires at 140 psi cold inflation pressure. 5. Capacities are applicable only with machine on firm level surface

6. All rubber lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation pressures. Damaged tires are hazardous to safe operation of crane. 7. WARNING: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping

with boom extension occurs rapidly and without advance warning.
 8. No load stability on rubber 360° with 15 ft. extension installed:

 a. Minimum boom angle for 40 ft. main boom = 30°
 b. Maximum main boom length at 0° main boom angle = 35 ft.

9. When lifting loads the minimum allowable boom angle is 3°

15 FT. EXTENSION RATED LIFTING CAPACITIES IN POUNDS ON RUBBER

STATIONARY - DEFINED ARC OVER FRONT

Radius		N	lain Boom L	ength in Fe	et	
Feet	17	20	25	30	35	40
6	8,070	8,070	8,070	**8,070		
8	8,070	8,070	8,070	8,070	7,550	
10	8,070	8,070	8,070	8,070	7,550	7,550
12	7,850	8,070	8,070	8,070	7,550	7,550
14	7,060	7,610	8,070	8,070	7,550	7,550
16	6,410	6,590	7,730	8,070	7,550	7,550
18	5,870	6,340	7,100	7,760	7,550	7,550
20	5,410	5,850	6,520	6,520	6,520	6,520
22	5,020	5,440	5,580	5,580	5,580	5,580
24	4,680	4,840	4,840	4,840	4,840	4,840
26	4,240	4,240	4,240	4,240	4,240	4,240
28	3,740	3,750	3,750	3,750	3,750	3,750
30		3,330	3,330	3,330	3,330	3,330
32			2,980	2,980	2,980	2,980
34			2,680	2,680	2,680	2,680
36			2,410	2,410	2,410	2,410
38				2,180	2,180	2,180
40				1,970	1,970	1,970
45					1,550	1,550
50						1,220
	Liftin	g Capacity On Rubber	at Three De Defined Ar	gree Boom A C Over Fron	Angle t	
Boom		N	lain Boom L	ength in Fe	et	
Angle	17	20	25	30	35	40
3°	2,700 (29)	2,450 (32)	1,990 (37)	1,560 (42)	1,240 (47)	1,000 (52)
** This capao Note: () Ref.	city based on r radii in feet.	maximum boor	n angle.		A6-8	329-100226D

- NOTES: 1. All capacities above the bold line are based on structural strength of boom extension and do not exceed 75% of tipping Ibads on rubber in accordance with SAE J765.
 So fine dArc - Over front includes 6° on either side of longitudinal centerline of machine. Pick and carry lifting NOT permitted.
- Capacities are applicable to machines equipped with 385/65R22.5 (J) Firestone T839 tires at 140 psi cold inflation pressure.
 Capacities are applicable only with machine on firm level surface.
- 6. All rubber lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation pressures. Damaged tires are hazardous to safe operation of crane.
- 7. WARNING: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning. 8. No load stability on rubber 360° with 15 ft. extension installed:
- a. Minimum boom angle for 40 ft. main boom = 40° b. Maximum main boom length at 0° main boom angle = 30 ft.

9. When lifting loads the minimum allowable boom angle is 3°

15 FT. OFFSETTABLE EXTENSION AT 0° OFFSET RATED LIFTING CAPACITIES IN POUNDS

ON OUTRIGGERS FULLY EXTENDED - 360°

Radius		N	lain Boom L	ength in Fe	et	
Feet	17	20	25	30	35	40
6	9,080	9,080	9,080	9,080		
8	9,080	9,080	9,080	9,080	9,080	*9,080
10	8,180	8,820	9,080	9,080	9,080	9,080
12	7,240	7,830	8,760	9,080	9,080	9,080
14	6,500	7,030	7,890	8,690	9,080	9,080
16	5,840	6,390	7,170	7,920	8,630	9,080
18	5,200	5,780	6,580	7,280	7,940	8,560
20	4,700	5,210	6,070	6,730	7,350	7,940
22	4,270	4,740	5,520	6,260	6,840	7,400
24	3,910	4,340	5,060	5,780	6,400	6,940
26	3,600	4,000	4,660	5,310	6,000	6,460
28	3,330	3,700	4,320	4,940	5,480	5,480
30		3,440	4,020	4,600	4,930	4,930
32			3,760	4,300	4,470	4,470
34			3,530	4,040	4,070	4,070
36			3,310	3,730	3,730	3,730
38				3,380	3,380	3,380
40				3,080	3,080	3,080
45					2,460	2,460
50						1,980
	Liftin	g Capacity a On Outrigge	at Three De rs Fully Ext	gree Boom ended - 360	Angle i	
Boom		N	lain Boom L	ength in Fe	et	
Angle	17	20	25	30	35	40
3°	3,260 (29)	3,260 (32)	3,260 (37)	2,810 (42)	2,250 (47)	1,820 (52)

NOTES:

A6-829-100724

1. All capacities above the bold line are based on structural strength of boom extension and do not exceed 85% of tipping loads on outriggers in accordance with SAE J765. 2. 15 ft. boom extension may be used for single line lifting service only.

3. WARNING: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning.

4. Capacities listed are with full yestended outriggers only.
5. No load stability on outriggers fully extended 360° with 15 ft. extension installed at 0° offset:
a. Minimum boom angle for 40 ft. main boom = 0°

b. Maximum main boom length at 0° main boom angle = 40 ft.
6. When lifting loads the minimum allowable boom angle is 3° at 0° offset.

Radius		Μ	lain Boom L	ength in Fe	et	
Feet	17	20	25	30	35	40
12	4,310					
14	4,140	4,210	4,300			
16	4,000	4,070	4,170	4,240	4,300	
18	3,890	3,950	4,050	4,130	4,200	4,260
20	3,810	3,860	3,960	4,040	4,110	4,170
22	3,740	3,800	3,880	3,960	4,030	4,090
24		3,740	3,820	3,890	3,960	4,020
26			3,780	3,830	3,900	3,960
28			3,720	3,790	3,850	3,900
30				3,760	3,810	3,850
32					3,780	3,820
34					3,740	3,790
36					3,710	3,730
38						3,380
	Lifting (Capacity at I On Outrigge	Forty Eight I rs Fully Ext	Degree Boo ended - 360	m Angle	
Boom		N	lain Boom L	ength in Fe	et	
Angle	17	20	25	30	35	40
48° **	3,710 (23.5)	3,710 (25.7)	3,710 (29.2)	3,710 (32.7)	3,670 (36.3)	3,110 (39.8)

15 FT. OFFSETTABLE EXTENSION AT 45° OFFSET RATED LIFTING CAPACITIES IN POUNDS

ON OUTRIGGERS FULLY EXTENDED - 360°

NOTES:

NOTES:
1. All capacities above the bold line are based on structural strength of boom extension and do not exceed 85% of tipping loads on outriggers in accordance with SAE J765.
2. 15 ft. boom extension may be used for single line lifting service only.
3. WARNING: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning.
4. Capacities listed are with fully extended outriggers only.
5. No load stability on outriggers fully extended 360° with 15 ft. extension installed at 45° offset:

a. Winnum boom angle for 40 ft. main boom = 45°

a. Minimum boom angle for 40 ft. main boom = 45°
 b. Maximum main boom length at 45° main boom angle = 40 ft.
 6. When lifting loads the minimum allowable boom angle is 48° at 45° offset.

Note: () Ref. radii in feet. * Radii are with the extension at horizontal.

Note: () Ref. radii in feet. *This capacity based on maximum boom angle

THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE. The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.

A6-829-100725

15 FT. OFFSETTABLE EXTENSION AT 0° OFFSET RATED LIFTING CAPACITIES IN POUNDS ON RUBBER

STATIONARY 360°

Radius		N	lain Boom L	ength in Fe.	et	
Feet	17	20	25	30	35	40
6	8,070	8,070	8,070	*8,070		
8	8,070	8,070	8,070	8,070	*7,550	
10	8,070	8,070	8,070	8,070	7,550	7,040
12	7,240	7,710	7,710	7,710	7,550	7,040
14	6,400	6,300	6,200	6,000	5,780	5,780
16	4,970	4,920	4,920	4,620	4,570	4,570
18	4,170	4,170	4,120	3,900	3,900	3,860
20	3,660	3,660	3,440	3,390	3,390	3,180
22	3,110	3,060	2,960	2,790	2,680	2,680
24	2,680	2,580	2,490	2,430	2,330	2,330
26	2,330	2,280	2,160	2,000	2,000	2,000
28	2,070	2,050	2,040	1,910	1,810	1,700
30		1,810	1,750	1,610	1,560	1,440
32			1,440	1,390	1,340	1,230
34			1,260	1,190	1,080	1,030
36			1,110	1,060	950	950
38				860	810	690
40				830	700	600
	Liftin	g Capacity a On	at Three De Rubber - 3	gree Boom 60°	Angle	
Boom		N	lain Boom L	ength in Fe.	et	
Angle	17	20	25	30		
3°	1,940 (29)	1,660 (32)	1,080 (37)	750 (42)		

NOTES:

A6-829-100726

1. All capacities above the bold line are based on structural strength of boom extension and do not exceed 75% of tipping loads on rubber in accordance with SAE J765.

2.15 ft. boom extension may be used for single line lifting service only.
 3. Defined Arc - Over front includes 6° on either side of longitudinal centerline of machine. Pick and carry lifting NOT

permitted. 4. Capacities are applicable to machines equipped with 385/65R22.5 (J) Firestone T839 tires at 140 psi cold inflation pressure.

5. Capacities are applicable only with machine on firm level surface. 6. All rubber lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation

pressures. Damaged tires are hazardous to safe operation of crane. 7. WARNING: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning. 8. No load stability on rubber 360° with 15 ft. extension installed at 0° offset:

a. Minimum boom angle for 40 ft. main boom = 38° ; for 35 ft. main boom = 20° b. Maximum main boom length at 0° main boom angle = 30 ft.

Note: () Ref. radii in feet. *This capacity based on maximum boom angle.

9. When lifting loads the minimum allowable boom angle is 3° at 0° offset.

15 FT.	OFFSE	TTABLE	EXTE	NSION	AT 4	5° O	FFSET	-
RATED L	IFTING	CAPACI	TIES I	IN POL	JNDS	ON	RUBBE	ER

		STA	TIONARY	360°					
Radius		Main Boom Length in Feet							
Feet	17	20	25	30	35	40			
12	4,310								
14	4,140	4,210	4,300						
16	4,000	4,070	4,170	4,240	*4,300				
18	3,890	3,950	4,050	4,130	4,200	4,260			
20	3,700	3,700	3,700	3,700	3,700	3,700			
22	3,160	3,160	3,160	3,160	3,160	3,160			
24		2,730	2,730	2,730	2,730	2,730			
26			2,370	2,370	2,370	2,370			
28			2,070	2,070	2,030	2,030			
30				1,760	1,760	1,760			
32				1,570	1,570	1,570			
34					1,320	1,270			
36						1,040			
38						860			
	Lifting (Capacity at I Or	Forty Eight I Rubber - 3	Degree Boo 60°	m Angle				

Main Boom Length in Feet Boom Angle 17 20 25 30 35 40 2,830 2,425 1,920 1,530 1,100 670 48° * (23.5)(25.7) (29.2) (32.7) (36.3) (39.8)

Note: () Ref. radii in feet. * This capacity based on maximum boom angle ** Radii are with the extension at horizontal.

NOTES:

1. All capacities above the bold line are based on structural strength of boom extension and do not exceed 75% of tipping loads on rubber in accordance with SAE J765.

 2. 15 ft. boom extension may be used for single line lifting service only.
 3. Defined Arc - Over front includes 6° on either side of longitudinal centerline of machine. Pick and carry lifting NOT permitted.

 Capacities are applicable to machines equipped with 385/65R22.5 (J) Firestone T839 tires at 140 psi cold inflation pressure. 5. Capacities are applicable only with machine on firm level surface. 6. All rubber lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation

pressures. Damaged tires are hazardous to safe operation of crane. 7. WARNING: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping

with boom extension occurs rapidly and without advance warning. 8. No load stability on rubber 360° with 15 ft. extension installed at 45° offset:

a. Minimum boom angle for 40 ft. main boom = 45°

b. Maximum main boom length at 45° main boom angle = 40 ft.

9. When lifting loads the minimum allowable boom angle is 48° at 45° offset.

A6-829-100727

15 FT. OFFSETTABLE EXTENSION AT 0° OFFSET RATED LIFTING CAPACITIES IN POUNDS ON RUBBER STATIONARY - DEFINED ARC OVER FRONT

Radius	Main Boom Length in Feet						
Feet	17	20	25	30	35	40	
6	8,070	8,070	8,070	*8,070			
8	8,070	8,070	8,070	8,070	7,550		
10	8,070	8,070	8,070	8,070	7,550	7,550	
12	7,240	7,830	8,070	8,070	7,550	7,550	
14	6,500	7,030	7,890	8,070	7,550	7,550	
16	5,840	6,390	7,170	7,920	7,550	7,550	
18	5,200	5,780	6,580	7,280	7,550	7,550	
20	4,700	5,210	6,070	6,520	6,520	6,520	
22	4,270	4,740	5,520	5,580	5,580	5,580	
24	3,910	4,340	4,840	4,840	4,840	4,840	
26	3,600	4,000	4,240	4,240	4,240	4,240	
28	3,330	3,700	3,750	3,750	3,750	3,750	
30		3,300	3,300	3,300	3,300	3,300	
32			2,930	2,930	2,930	2,930	
34			2,600	2,600	2,600	2,600	
36			2,320	2,320	2,320	2,320	
38				2,070	2,070	2,070	
40				1,850	1,850	1,850	
45					1,400	1,400	
50						1,050	
	Liftin	g Capacity a On Rubber	at Three De Defined Ar	gree Boom c Over Fron	Angle t		
Boom		N	lain Boom L	ength in Fe	et		
Angle	17	20	25	30	35	40	
3°	2,700 (29)	2,450 (32)	1,990 (37)	1,560 (42)	1,240 (47)	930 (52)	

Note: () Ref. radii in feet. *This capacity based on maximum boom angle.

A6-829-100728

NOTES: 1. All capacities above the bold line are based on structural strength of boom extension and do not exceed 75% of tipping loads on rubber in accordance with SAE J765.

15 ft. boom extension may be used for single line lifting service only.
 Defined Arc - Over front includes 6° on either side of longitudinal centerline of machine. Pick and carry lifting NOT permitted.
 Capacities are applicable to machines equipped with 385/65R22.5 (J) Firestone T839 tires at 140 psi cold inflation pressure.
 Capacities are applicable only with machine on firm level surface.

6. All rubber lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation pressures. Damaged tires are hazardous to safe operation of crane.

WARNING: Operation of this machine with heavier loads that the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning.
 No load stability on rubber (defined arc) with 15 ft. extension installed at 0° offset:

a. Minimum boom angle for 40 ft. main boom = 0° b. Maximum main boom length at 0° main boom angle = 40 ft.

9. When lifting loads the minimum allowable boom angle is 3° at 0° offset.

15 FT. OFFSETTABLE EXTENSION AT 45° OFFSET RATED LIFTING CAPACITIES IN POUNDS ON RUBBER STATIONARY - DEFINED ARC OVER FRONT

Radius		Ν	lain Boom L	ength in Fe.	et				
Feet	17	20	25	30	35	40			
12	4,310								
14	4,140	4,210	4,300						
16	4,000	4,070	4,170	4,240	4,300				
18	3,890	3,950	4,050	4,130	4,200	4,260			
20	3,810	3,860	3,960	4,040	4,110	4,170			
22	3,740	3,800	3,880	3,960	4,030	4,090			
24		3,740	3,820	3,890	3,960	4,020			
26			3,780	3,830	3,900	3,960			
28			3,720	3,750	3,750	3,750			
30				3,310	3,310	3,310			
32				2,930	2,930	2,930			
34					2,610	2,610			
36						2,320			
38						2,080			
	Lifting Capacity at Forty Eight Degree Boom Angle On Rubber - Defined Arc Over Front								

Boom	Main Boom Length in Feet									
Angle	17	20	25	30	35	40				
48° **	3,710 (23.5)	3,710 (25.7)	3,470 (29.2)	2,810 (32.7)	2,280 (36.3)	1,880 (39.8)				

NOTES:

- 1. All capacities above the bold line are based on structural strength of boom extension and do not exceed 75% of tipping In a particulation of the second and t

3. Defined Arc - Over front includes 6° on either side of longitudinal centerline of machine. Pick and carry lifting NOT permitted. 4. Capacities are applicable to machines equipped with 385/65R22.5 (J) Firestone T839 tires at 140 psi cold inflation pressure.

- Capacities are applicable only with machine on firm level surface.
 All rubber lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation
- pressures. Damaged tires are hazardous to safe operation of crane.
- 7. WARNING: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning. 8. No load stability on rubber (defined arc) with 15 ft. extension installed at 45° offset: a. Minimum boom angle for 40 ft. main boom = 45°

b. Maximum main boom length at 45° main boom angle = 40 ft.
 9. When lifting loads the minimum allowable boom angle is 48° at 45° offset.

Note: () Ref. radii in feet.

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Radii are with the extension at horizontal.





RATED LIFTING CAPACITIES IN POUNDS ON OUTRIGGERS FULLY EXTENDED - 360°

Radius			Main B	oom Length	in Feet		
Feet	* 21 (22.8)	* 25 (26.4)	* 30 (31.4)	* 35 (36.4)	* 40 (41.4)	* 45 (46.4)	* 52 (53.4)
6	30,000	25,450	25,100	24,900	**24,200		
8	27,600	25,450	25,100	24,900	24,200	**21,800	
10	22,350	22,450	22,550	22,600	22,650	21,800	**18,500
12	18,200	18,300	18,400	18,500	18,500	18,550	18,300
14	15,150	15,250	15,300	15,400	15,400	15,450	15,500
16	12,550	12,700	12,750	12,800	12,850	12,900	12,900
18		10,750	10,850	10,900	10,950	10,950	11,000
20		9,270	9,400	9,450	9,490	9,500	9,500
22			8,090	8,090	8,090	8,090	8,090
24			7,000	7,000	7,000	7,000	7,000
26			6,130	6,130	6,130	6,130	6,130
28				5,410	5,410	5,410	5,410
30				4,820	4,820	4,820	4,820
32					4,310	4,310	4,310
34					3,880	3,880	3,880
36					3,510	3,510	3,510
38						3,180	3,180
40						2,890	2,890
44							2,410
48							2,020
	Minimum	boom angle	(0°) for indi	cated length	n (no load)		0
	Maximum	n boom leng	th (ft.) at 0°	boom angle	(no load)		52
		Lifting Cap On Or	oacity at Zer utriggers Fu	o Degree Bo Ily Extended	oom Angle d 360°		
Boom			Main B	oom Length	in Feet		
Angle	* 21 (22.8)	* 25 (26.4)	* 30 (31.4)	* 35 (36.4)	* 40 (41.4)	* 45 (46.4)	* 52 (53.4)
0°	7,190 (17.7)	5,970 (21.3)	4,740 (26.3)	3,850 (31.3)	3,170 (36.3)	2,630 (41.3)	1,990 (48.3)

21 FT. - 52 FT. BOOM

Note: () Reference radii in feet. (Applicable to boom nose sheaves in down position only.)

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*Boom length varies between boom nose sheaves in down position (in bold), or up & out position (in parenthesis).

**Capacity based on maximum boom angle.

- 1. Capacities do not exceed 85% of tipping loads as determined by test in accordance with SAE J765.
- 2. Capacities appearing above the bold line are based on structural strength and tipping should not be relied upon as a capacity limitation.
- 3. With boom nose sheaves down (in lower position), single, 2-part or 4-part line may be used. With boom nose sheaves up and out (low profile position), single or 2-part line may be used, with maximum boom angle limited to 70°.

RATED LIFTING CAPACITIES IN POUNDS ON RUBBER

STATIONARY - 360°									
Radius			Main B	oom Length	in Feet				
Feet	* 21 (22.8)	* 25 (26.4)	* 30 (31.4)	* 35 (36.4)	* 40 (41.4)	* 45 (46.4)	* 52 (53.4)		
6	16,400	16,400	16,400	16,400	**16,400				
8	11,900	11,900	11,900	11,900	11,900	**11,900			
10	9,190	9,190	9,190	9,190	9,190	9,190	**9,150		
12	7,350	7,350	7,350	7,350	7,350	7,350	7,270		
14	5,540	5,690	5,690	5,690	5,690	5,740	5,740		
16	4,360	4,360	4,360	4,360	4,360	4,360	4,360		
18		3,750	3,750	3,750	3,750	3,750	3,750		
20		3,000	3,000	3,000	3,000	3,000	3,000		
22			2,590	2,590	2,590	2,590	2,590		
24			2,030	2,030	2,030	2,030	2,030		
26			1,790	1,790	1,790	1,790	1,790		
28				1,500	1,500	1,500	1,500		
30				1,290	1,290	1,290	1,290		
32					1,170	1,170	1,170		
34					820	820	820		
Min	imum boom	angle (0°) f	or indicated	length (no le	oad)	24	38		
Ma	ximum boon	n length (ft.)	at 0° boom	angle (no lo	ad)	4	0		
		Lifting Ca	pacity at Zer On Rub	o Degree B ber 360°	oom Angle				
Boom			Main B	oom Length	in Feet				
Angle	* 21 (22.8)	* 25 (26.4)	* 30 (31.4)	* 35 (36.4)	*40 (41.4)				
0°	3,700 (17.7)	2,660 (21.3)	1,600 (26.3)	1,050 (31.3)	640 (36.3)				
Note: () Refe	erence radii in	feet. (Applicat	ole to boom no	se sheaves		A6-	329-100746A		

in down position only.)

*Boom length varies between boom nose sheaves in down position (in bold), or up & out position (in parenthesis).

**Capacity based on maximum boom angle

Capacities are in pounds and do not exceed 75% of tipping loads as determined by test in accordance with SAE J765.
 Capacities are applicable to machines equipped with 385/65R22.5 (J) Firestone T839 tires at 140 psi cold inflation pressure.
 Defined Arc - Over front includes 6° on either side of longitudinal centerline of machine.

- Defined Arc Over front includes 6° on either side of longitudinal centerline of machine.
 Capacities are applicable only with machine on firm level surface.
 Stall rubber lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation pressures. Damaged tires are hazardous to safe operation of crane.
 For pick and carry operation, the boom, using the shortest practical boom length, must be centered over front of machine. When handling loads in the structural range with capacities close to maximum ratings, travel should be reduced to creep speed*. 2.5 m.p.h. capacities are permissible on main boom only, NOT on boom extension.
 *Creep not over 200 ft, of movement in any 30 minute period and not exceeding 1 mph.
 *When hance machine draw (in wave presition) circle 3 and red ward time with boom percephagement in and
- 7. With boom nose sheaves down (in lower position), single, 2-part or 4-part line may be used. With boom nose sheaves up and out (low profile position), single or 2-part line may be used, with maximum boom angle limited to 70°.

RATED LIFTING CAPACITIES IN POUNDS ON RUBBER

PICK & CARRY AND STATIONARY - DEFINED ARC OVER FRONT

Radius			Main B	oom Length	in Feet		
Feet	* 21 (22.8)	* 25 (26.4)	* 30 (31.4)	* 35 (36.4)	* 40 (41.4)	* 45 (46.4)	* 52 (53.4)
6	19,350	19,350	19,350	19,350	**19,350		
8	15,500	15,500	15,500	15,500	15,500	**15,500	
10	12,800	12,800	12,800	12,800	12,800	12,800	**12,800
12	10,800	10,800	10,800	10,800	10,800	10,800	10,800
14	9,310	9,310	9,310	9,310	9,310	9,310	9,310
16	8,100	8,100	8,100	8,100	8,100	8,100	8,100
18		7,070	7,070	7,070	7,070	7,070	7,070
20		6,150	6,150	6,150	6,150	6,150	6,150
22			5,230	5,230	5,230	5,230	5,230
24			4,500	4,500	4,500	4,500	4,500
26			3,910	3,910	3,910	3,910	3,910
28			K A	3,430	3,430	3,430	3,430
30				3,020	3,020	3,020	3,020
32					2,680	2,680	2,680
34					2,380	2,380	2,380
36					2,120	2,120	2,120
38						1,890	1,890
40						1,690	1,690
44							1,350
48							1,070
	Minimum	boom angle	(0°) for indi	cated length	n (no load)		0
	Maximum	ı boom leng	th (ft.) at 0° l	boom angle	(no load)		52
	I	Lifting Cap On Rubbe	acity at Zer r - Defined	o Degree E Arc and Pi	Soom Angle ck & Carry	9	
Boom			Main B	oom Length	in Feet		
Angle	* 21 (22.8)	* 25 (26.4)	* 30 (31.4)	*35 (36.4)	*40 (41.4)	*45 (46.4)	*52 (53.4)
0°	7,190 (17.7)	5,550 (21.3)	3,850 (26.3)	2,800 (31.3)	2,090 (36.3)	1,580 (41.3)	1,060 (48.3)
Note: () Refe	rence radii in	feet. (Applicat	ble to boom no	se sheaves		A6	-829-100747

Note: () Reference radii in feet. (Applicable to boom nose sheaves in down position only.)

*Boom length varies bet parenthesis). een boom nose sheaves in down position (in bold), or up & out position (in

**Capacity based on maximum boom angle

15 FT. EXTENSION RATED LIFTING CAPACITIES IN POUNDS

ON OUTRIGGERS FULLY EXTENDED - 360°

Radius			Main B	oom Length	in Feet		
in Feet	21	25	30	35	40	45	52
6	9,080	9,080	9,080	9,080			
8	9,080	9,080	9,080	9,080			
10	9,080	9,080	9,080	9,080	9,080	9,080	
12	8,370	9,080	9,080	9,080	9,080	9,080	9,080
14	7,510	8,150	8,780	9,080	9,080	9,080	9,080
16	6,810	7,400	8,060	8,410	8,630	8,980	9,080
18	6,220	6,770	7,440	7,810	8,050	8,430	8,480
20	5,630	6,240	6,920	7,500	7,770	7,940	8,030
22	5,110	5,690	6,430	7,030	7,320	7,510	7,630
24	4,680	5,210	5,820	6,180	6,460	7,120	7,270
26	4,310	4,800	5,490	5,840	6,320	6,760	6,760
28	4,000	4,450	5,090	5,730	5,980	5,980	5,980
30	3,720	4,140	4,740	5,330	5,330	5,330	5,330
32	3,470	3,870	4,430	4,780	4,780	4,780	4,780
34		3,630	4,160	4,310	4,310	4,310	4,310
36		3,410	3,900	3,900	3,900	3,900	3,900
38			3,540	3,540	3,540	3,540	3,540
40			3,230	3,230	3,230	3,230	3,230
45				2,590	2,590	2,590	2,590
50					2,090	2,090	2,090
55						1,690	1,690
60				0			1,370
	Minimum	boom angle	e (°) for indi	cated length	(no load)		0
	Maximun	n boom leng	th (ft.) at 0°	boom angle	(no load)		52
		Lifting Cap On Ou	acity at Thr triggers Fu	ee Degree B Ily Extended	oom Angle I - 360°		
Boom			Main B	oom Length	in Feet		
Angle	21	25	30	35	40	45	
3 °	3,210 (33.4)	3,210 (37)	2,950 (42)	2,370 (47)	1,920 (52)	1,550 (57)	1,150 (64)

Note: () Ref. radii in feet.

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NOTES:

- 1. All capacities above the bold line are based on structural strength of boom extension and do not exceed 85% of tipping loads on outriggers in accordance with SAE J765.
- 2. 15 ft. boom extension may be used for single line lifting service only.
- 3. WARNING: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning.
- 4. Capacities listed are with fully extended outriggers only.
- 5. When lifting loads the minimum allowable boom angle is 3°.

15 FT. EXTENSION RATED LIFTING CAPACITIES IN POUNDS ON RUBBER

STATIONARY 3600

Radius			Main B	oom Length	in Feet		
Feet	21	25	30	35	40	45	52
6	9,080	9,080	**9,080				
8	9,080	9,080	9,080	**9,080			
10	9,080	9,080	9,080	9,080	9,080		
12	7,970	7,970	7,970	7,910	7,860	7,860	
14	6,600	6,600	6,480	6,480	6,330	6,330	6,220
16	5,480	5,380	5,330	5,280	5,280	5,230	5,180
18	4,670	4,550	4,520	4,520	4,520	4,340	4,340
20	3,950	3,830	3,700	3,700	3,650	3,650	3,600
22	3,370	3,270	3,210	3,210	3,110	3,110	3,110
24	2,880	2,850	2,750	2,700	2,600	2,550	2,450
26	2,510	2,410	2,360	2,250	2,200	2,200	2,150
28	2,160	2,160	2,040	1,940	1,890	1,890	1,790
30	1,890	1,840	1,740	1,690	1,580	1,580	1,580
32	1,640	1,580	1,430	1,430	1,370	1,370	1,370
34		1,370	1,300	1,220	1,170	1,120	1,120
36		1,230	1,120	1,070	970	920	920
Minimum	boom angle (no	(°) for indica load)	ted length	31	38	44	50
Maximum	n boom lengti (no	h (ft.) at 0° bo load)	oom angle		3	0	
		Lifting Cap O	acity at Thr n Rubber St	ee Degree B ationary - 36	loom Angle 50°		
Boom			Main B	oom Length	in Feet		
Angle	21	25					
3°	1,510 (33.4)	1,130 (37)					

Note: () Ref. radii in feet.. **This capacity based on maximum boom angle.

- A6-829-100755A
- 6. All rubber lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation pressures. Damaged tires are hazardous to safe operation of crane. WARNING: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping
 with boom extension occurs rapidly and without advance warning.

NOTES:

permitted.

8. When lifting loads the minimum allowable boom angle is $3^{\circ}.$

1. All capacities above the bold line are based on structural strength of boom extension and do not exceed 75% of tipping Independence of the control of the con

Capacities are applicable to machines equipped with 385/65R22.5 (J) Firestone T839 tires at 140 psi cold inflation pressure.
 Capacities are applicable only with machine on firm level surface.

15 FT. EXTENSION RATED LIFTING CAPACITIES IN POUNDS ON RUBBER

STATIONARY - DEFINED ARC OVER FRONT

Feet 6 8 10	21 9,080 9,080	25 9,080	30	35	40	45	52
6 8 10	9,080 9,080	9,080				.0	32
8 10	9,080		9,080	**9,080			
10		9,080	9,080	9,080			
	9,080	9,080	9,080	9,080	9,080	**9,080	
12	8,370	9,080	9,080	9,080	9,080	9,080	**9,080
14	7,510	8,150	8,780	9,080	9,080	9,080	9,080
16	6,810	7,400	8,060	8,410	8,600	8,600	8,600
18	6,220	6,770	7,440	7,600	7,600	7,600	7,600
20	5,630	6,240	6,760	6,760	6,760	6,760	6,760
22	5,110	5,690	5,910	5,910	5,910	5,910	5,910
24	4,680	5,110	5,110	5,110	5,110	5,110	5,110
26	4,310	4,450	4,450	4,450	4,450	4,450	4,450
28	3,920	3,920	3,920	3,920	3,920	3,920	3,920
30	3,470	3,470	3,470	3,470	3,470	3,470	3,470
32	3,080	3,080	3,080	3,080	3,080	3,080	3,080
34		2,750	2,750	2,750	2,750	2,750	2,750
36		2,460	2,460	2,460	2,460	2,460	2,460
38			2,210	2,210	2,210	2,210	2,210
40			1,990	1,990	1,990	1,990	1,990
45				1,530	1,530	1,530	1,530
50					1,170	1,170	1,170
55						880	880
	Minimum	boom angle	e (°) for indi	cated length	(no load)		0
	Maximum	n boom leng	th (ft.) at 0°	boom angle	(no load)		52
		Lifting Cap On Ru	acity at Thr bber - Defin	ee Degree B led Arc Over	oom Angle r Front		
Boom			Main B	oom Length	in Feet		
Angle	21	25	30	35	40	45	
3°	2,850 (33.4)	2,330 (37)	1,790 (42)	1,370 (47)	1,050 (52)	780 (57)	

NOTES:

- NOTES: 1. All capacities above the bold line are based on structural strength of boom extension and do not exceed 75% of tipping loads on rubber in accordance with SAE J765. 2. 15 ft. boom extension may be used for single line lifting service only. 3. Defined Arc Over front includes 6° on either side of longitudinal centerline of machine. Pick and carry lifting NOT permitted. 4. Capacities are applicable to machines equipped with 385/65R22.5 (J) Firestone T839 tires at 140 psi cold inflation pressure. 5. Capacities are applicable only with machine on firm level surface.
- All rubbers and approach only man income of many even of a condition. Capacities must be reduced for lower tire inflation pressures. Damaged tires are hazardous to safe operation of crane.
 WARNING: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom

extension occurs rapidly and without advance warning. 8. When lifting loads the minimum allowable boom angle is 3° .

**This capacity is based upon maximum boom angle. Note: () Ref. radii in feet.

15 FT. OFFSETTABLE EXTENSION AT 0° OFFSET RATED LIFTING CAPACITIES IN POUNDS

ON OUTRIGGERS FULLY EXTENDED - 360°

Radius	Main Boom Length in Feet									
Feet	21	25	30	35	40	45	52			
6	9,080	9,080	*9,080							
8	9,080	9,080	9,080	9,080						
10	9,080	9,080	9,080	9,080	9,080	*9,080				
12	8,370	9,080	9,080	9,080	9,080	9,080	*9,080			
14	7,510	8,150	8,780	9,080	9,080	9,080	9,080			
16	6,810	7,400	8,060	8,410	8,630	8,980	9,080			
18	6,160	6,770	7,440	7,810	8,050	8,430	8,480			
20	5,550	6,180	6,920	7,500	7,770	7,940	8,030			
22	5,050	5,620	6,430	7,030	7,320	7,510	7,630			
24	4,620	5,150	5,820	6,180	6,460	7,120	7,270			
26	4,260	4,740	5,420	5,840	6,320	6,600	6,580			
28	3,940	4,390	5,020	5,650	5,830	5,830	5,830			
30	3,670	4,090	4,670	5,180	5,180	5,180	5,180			
32	3,420	3,820	4,370	4,630	4,630	4,630	4,630			
34		3,580	4,100	4,160	4,160	4,160	4,160			
36		3,370	3,750	3,750	3,750	3,750	3,750			
38			3,400	3,400	3,400	3,400	3,400			
40			3,080	3,080	3,080	3,080	3,080			
45				2,440	2,440	2,440	2,440			
50					1,940	1,940	1,940			
55						1,550	1,550			
60							1,220			
		Lifting Cap On Ou	acity at Thr triggers Ful	ee Degree E ly Extended	Boom Angle - 360°					
Boom			Main B	oom Length	in Feet					
Angle	21	25	30	35	40	45	52			
3°	3,210 (33,4)	3,210 (37)	2,800 (42)	2,230 (47)	1,770 (52)	1,410 (57)	1,010 (64)			

NOTES:

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NOTES:
1. All capacities above the bold line are based on structural strength of boom extension and do not exceed 85% of tipping loads on outriggers in accordance with SAE J765.
2. 15 ft. offsettable boom extension may be used for single line lifting service only.
3. WARNING: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning.
4. Capacities listed are with fully extended outriggers only.
5. No load stability on outriggers fully extended 360° with 15 ft offsettable extension installed at 0° offset:

a. Minimum boom angle for 52 ft. main boom = 0°
b. Maximum main boom length at 0° main boom angle = 52 ft.
6. When lifting loads the minimum allowable boom ancle is 3° at 0° offset

6. When lifting loads the minimum allowable boom angle is 3° at 0° offset.

Note: () Ref. radii in feet. *This capacity based on maximum boom angle.

	ON OUTRIGGERS FULLY EXTENDED - 360°									
Radius		N	lain Boom L	ength in Fe	et					
Feet	21	25	30	35	40	45	52			
12	4,450	*4,500								
14	4,280	4,350	*4,420	*4,480						
16	4,140	4,210	4,290	4,360	*4,420	*4,460				
18	4,020	4,090	4,180	4,250	4,310	4,360	4,420			
20	3,920	3,990	4,080	4,150	4,220	4,270	4,330			
22	3,850	3,910	3,990	4,070	4,130	4,190	4,260			
24	3,800	3,850	3,920	3,990	4,060	4,120	4,180			
26	3,710	3,800	3,860	3,930	3,990	4,050	4,120			
28		3,730	3,820	3,870	3,930	3,990	4,060			
30			3,780	3,830	3,880	3,940	4,000			
32			3,710	3,800	3,840	3,890	3,950			
34				3,750	3,810	3,850	3,910			
36				2,930	3,750	3,750	3,750			
38					3,400	3,400	3,400			
40						3,080	3,080			
45							2,440			
	Li	ifting Capac On Ou	ity at Forty I Itriggers Ful	Eight Degree Iy Extended	e Boom Ang ∣- 360°	le				
Boom			Main B	oom Length	in Feet					
Angle	21	25	30	35	40	45	52			
48° **	3,710 (26.7)	3,710 (29.2)	3,630 (32.7)	2,810 (36.3)	2,180 (39.8)	1,680 (43.3)	1,130 (48.3)			
Note: () Ref.	radii in feet.					A6-8	329-100749A			

15 FT. OFFSETTABLE EXTENSION AT 45° OFFSET RATED LIFTING CAPACITIES IN POUNDS

NOTES:
1. All capacities above the bold line are based on structural strength of boom extension and do not exceed 85% of tipping loads on outriggers in accordance with SAE J765.
2. 15 ft. offsettable boom extension may be used for single line lifting service only.
3. WARNING: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning.
4. Capacities listed are with fully extended outriggers only.
5. No load stability on outriggers fully extended 360° with 15 ft. offsettable extension installed at 45° offset:

a. Minimum boom angle for 52 ft. main boom = 45°
b. Maximum main boom length at 45° main boom angle = 52 ft.

6. When lifting loads the minimum allowable boom angle is 48° at 45° offset.

angle **Radii are with extension at horizontal.

15 FT. OFFSETTABLE EXTENSION AT 0° OFFSET RATED LIFTING CAPACITIES IN POUNDS ON RUBBER

		\$	STATIONA	RY 360°							
Radius		Main Boom Length in Feet									
Feet	21	25	30	35	40	45	52				
6	9,080	9,080	*9,080								
8	9,080	9,080	9,080	*9,080							
10	9,080	9,080	9,080	9,080	9,080						
12	7,970	7,970	7,910	7,910	7,860	7,860					
14	6,360	6,360	6,360	6,360	6,220	6,220	*6,220				
16	5,280	5,280	5,180	5,180	5,180	5,180	5,180				
18	4,350	4,350	4,350	4,350	4,150	4,100	4,000				
20	3,770	3,720	3,620	3,500	3,450	3,450	3,330				
22	3,230	3,130	3,020	2,910	2,910	2,830	2,780				
24	2,730	2,680	2,570	2,520	2,470	2,370	2,370				
26	2,420	2,310	2,210	2,160	2,110	2,010	2,010				
28	2,060	2,010	1,960	1,840	1,730	1,730	1,730				
30	1,820	1,690	1,590	1,540	1,490	1,490	1,490				
32	1,580	1,470	1,350	1,300	1,240	1,240	1,240				
34		1,250	1,190	1,120	1,120	1,010	1,010				
36		1,100	1,040	920	920	810	810				
		Lifting Cap	acity at Thr On Rubb	ee Degree E oer - 360°	Boom Angle		-				
Boom			Main B	oom Length	in Feet						
Angle	21	25									
3°	1,430 (33.4)	1,090 (37)									
Note: () Ref.	radii in feet.		· · ·			A6-8	329-100750A				

NOTES:

All capacities above the bold line are based on structural strength of boom extension and do not exceed 75% of tipping loads on rubber in accordance with SAE J765.

15 ft. offsettable boom extension may be used for single line lifting service only.
 Defined Arc - Over front includes 6° on either side of longitudinal centerline of machine. Pick and carry lifting NOT

permitted. 4. Capacities are applicable to machines equipped with 385/65R22.5 (J) Firestone T839 tires at 140 psi cold inflation pressure. 5. Capacities are applicable only with machine on firm level surface

6. All rubber lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation pressures. Damaged tires are hazardous to safe operation of crane.

7. WARNING: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning.

 No load stability on rubber 360° with 15 ft. offsettable extension installed at 0° offset:
 a. Minimum boom angle for 52 ft. main boom = 50°; for 45 ft. main boom = 43°; for 40 ft. main boom = 37°; for 35 ft. main boom = 29°

b. Maximum main boom length at 0° main boom angle = 30 ft. 9. When lifting loads the minimum allowable boom angle is 3° at 0° offset.

*This capacity based on maximum boom angle	
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15 FT. OFFSETTABLE EXTENSION AT 45° OFFSET RATED LIFTING CAPACITIES IN POUNDS ON RUBBER

STATIONARY 360°

Radius		Main Boom Length in Feet									
Feet	21	25	30	35	40	45	52				
12	*4,450	*4,500									
14	4,280	4,350	*4,420	*4,480							
16	4,140	4,210	4,290	4,360	*4,420						
18	4,020	4,090	4,180	4,250	4,310	*4,360					
20	3,860	3,860	3,860	3,860	3,860	3,860	*3,860				
22	3,290	3,290	3,290	3,290	3,290	3,290	3,290				
24	2,820	2,820	2,820	2,820	2,820	2,820	2,820				
26	2,430	2,430	2,430	2,430	2,430	2,430	2,430				
28		2,100	2,100	2,100	2,100	2,100	2,100				
30			1,820	1,820	1,820	1,820	1,820				
32			1,580	1,580	1,580	1,580	1,580				
34				1,360	1,360	1,360	1,360				
36				1,110	1,110	1,110	1,110				
38					1,000	930	930				
	Li	ifting Capac	ity at Forty I On Rubb	Eight Degre per - 360°	e Boom Ang	gle					

Main Boom Length in Feet

35

,060

(36.3)

40

770

(39.8)

30

1,500

(32.7)

NOTES:

All capacities above the bold line are based on structural strength of boom extension and do not exceed 75% of tipping loads on rubber in accordance with SAE J765.

15 ft. offsettable boom extension may be used for single line lifting service only.
 Defined Arc - Over front includes 6° on either side of longitudinal centerline of machine. Pick and carry lifting NOT

permitted. 4. Capacities are applicable to machines equipped with 385/65R22.5 (J) Firestone T839 tires at 140 psi cold inflation pressure. 5. Capacities are applicable only with machine on firm level surface.

6. All rubber life in photoas on proper tire inflation, capacities on the capacities must be reduced for lower tire inflation pressures. Damaged tires are hazardous to safe operation of crane.
7. WARNING : Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping

with boom extension occurs rapidly and without advance warning. 8. No load stability on rubber 360° with 15 ft. offsettable extension installed at 45° offset: a. Minimum boom angle for 52 ft. main boom = 56°

b. Maximum main boom length at 45° main boom angle = 45 ft. 9. When lifting loads the minimum allowable boom angle is 48° at 45° offset

Note: () Ref. radii in feet. *This capacity based on maximum boom angle. ** Radii are with the extension at horizontal.

25

1,930

(29.2)

21

2,310

(26.7)

Boom

Angle

48° **

THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE. The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.

A6-829-100751A

GROVE YB4415/YB4415XT

15 FT. OFFSETTABLE EXTENSION AT 0° OFFSET RATED LIFTING CAPACITIES IN POUNDS ON RUBBER

STATIONARY - DEFINED ARC OVER FRONT							
Radius	Main Boom Length in Feet						
Feet	21	25	30	35	40	45	52
6	9,080	9,080	*9,080				
8	9,080	9,080	9,080	9,080			
10	9,080	9,080	9,080	9,080	9,080		
12	8,370	9,080	9,080	9,080	9,080	9,080	*9,080
14	7,510	8,150	8,780	9,080	9,080	9,080	9,080
16	6,810	7,400	8,060	8,170	8,170	8,170	8,170
18	6,160	6,770	7,330	7,330	7,330	7,330	7,330
20	5,550	6,180	6,590	6,590	6,590	6,590	6,590
22	5,050	5,620	5,720	5,720	5,720	5,720	5,720
24	4,620	4,920	4,920	4,920	4,920	4,920	4,920
26	4,260	4,280	4,280	4,280	4,280	4,280	4,280
28	3,750	3,750	3,750	3,750	3,750	3,750	3,750
30	3,310	3,310	3,310	3,310	3,310	3,310	3,310
32	2,930	2,930	2,930	2,930	2,930	2,930	2,930
34		2,600	2,600	2,600	2,600	2,600	2,600
36		2,320	2,320	2,320	2,320	2,320	2,320
38			2,070	2,070	2,070	2,070	2,070
40			1,850	1,850	1,850	1,850	1,850
45				1,400	1,400	1,400	1,400
50					1,040	1,040	1,040
Lifting Capacity at Three Degree Boom Angle On Rubber - Defined Arc Over Front							
Boom			Main B	oom Length	in Feet		
Angle	21	25	30	35	40	45	
3°	2,700 (33.4)	2,190 (37)	1,650 (42)	1,240 (47)	920 (52)	620 (57)	
Note: () Ref. radii in feet. A6-829-100752A							

NOTES:

1. All capacities above the bold line are based on structural strength of boom extension and do not exceed 75% of tipping loads on rubber in accordance with SAE J765.

 2. 15 ft. offsettable boom extension may be used for single line lifting service only.
 3. Defined Arc - Over front includes 6° on either side of longitudinal centerline of machine. Pick and carry lifting NOT permitted.

A. Capacities are applicable to machines equipped with 385/65R22.5 (J) Firestone T839 tires at 140 psi cold inflation pressure.
 5. Capacities are applicable only with machine on firm level surface.

6. All rubber lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation pressures. Damaged tires are hazardous to safe operation of crane.

7. WARNING: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping

with boom extension occurs rapidly and without advance warning. 8. No load stability on rubber (defined arc) with 15 ft. offsettable extension installed at 0° offset:

a. Minimum boom angle for 52 ft. main boom = 21° b. Maximum main boom length at 0° main boom angle = 45 ft.

9. When lifting loads the minimum allowable boom angle is 3° at 0° offset.

15 FT.	OFFSETTABLE EXTENSION AT 45° OFFSET
RATED L	IFTING CAPACITIES IN POUNDS ON RUBBER

STATIONARY - DEFINED ARC OVER FRONT Main Boom Length in Feet Radius in 21 25 30 35 40 45 52 Feet 4 4 5 0 *4 500 12 14 4.280 4.350 *4.420 *4.480 16 4,140 4,210 4,290 4,360 *4,420 18 4,020 4,090 4,180 4,250 4,310 4,360 20 3,920 3,990 4,080 4,150 4,220 4,270 4,330 22 3,850 3,910 3,990 4,070 4,130 4,190 4,260 3 850 4.120 24 3 800 3 920 3 9 9 0 4 060 4 180 26 3,710 3.800 3,860 3.930 3.990 4,050 4.120 28 3.730 3,750 3,750 3,750 3,750 3.750 30 3,310 3,310 3,310 3,310 3,310 32 2,930 2,930 2,930 2,930 2,930 34 2,600 2,600 2,600 2,600 36 2.320 2.320 2.320 2 3 2 0 38 2.070 2.070 2.070 40 1,850 1,850 45 1,400 Lifting Capacity at Forty Eight Degree Boom Angle On Rubber - Defined Arc Over Front Main Boom Length in Feet

Boom	Main Boon Eengannin eet							
Angle	21	25	30	35	40	45	52	
48° **	3,710 (26.7)	3,480 (29.2)	2,810 (32.7)	2,280 (36.3)	1,870 (39.8)	1,540 (43.3)	1,130 (48.3)	
lote:() Ref. n	adii in feet.					A6	-829-100753A	

This capacity based on maximum boom angle * Radii are with the extension at horizontal.

NOTES:

All capacities above the bold line are based on structural strength of boom extension and do not exceed 75% of tipping loads on rubber in accordance with SAE J765.

 2.15 ft. offsettable boom extension may be used for single line lifting service only.
 3. Defined Arc - Over front includes 6° on either side of longitudinal centerline of machine. Pick and carry lifting NOT permitted. 4. Capacities are applicable to machines equipped with 385/65R22.5 (J) Firestone T839 tires at 140 psi cold inflation pressure.

5. Capacities are applicable only with machine on firm level surface

All rubber lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation pressures. Damaged tires are hazardous to safe operation of crane.

7. WARNING: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning.

8 No load stability on rubber (defined arc) with 15 ft offsettable extension installed at 45° offset:

a. Minimum boom angle for 52 ft. main boom = 45° b. Maximum main boom length at 45° main boom angle = 52 ft.

9. When lifting loads the minimum allowable boom angle is 48° at 45° offset.

LOAD DISTRIBUTION CHART FOR CARRY DECK



Maximum Allowable Uniformly Distributed Load

<u>AREA 1</u>	
43.2 sq. ft. / 4.01 m ²	13,195 lb. / 5,985 kg
AREA 2	-
23.1 sq. ft. / 2.15 m ²	6,805 lb. / 3,087 kg
<u>TOTAL</u>	
66.3 sq. ft. / 6.16 m ²	20,000 lb. / 9,072 kg

- 1. Maximum travel speed with any or all loads 2.5 MPH (4.0 km/h)
- 2. Loads to be transported on smooth level firm surfaces only.
- 3. Boom must be retracted and in center forward position.
- 4. Any combination or total of areas 1 & 2 may be used.
- 5. Lifting is not permitted when carry deck is loaded except for loading and unloading carry deck.
- 6. Rated pick and carry loads may be transported on deck area 1 provided the load is cribbed directly on the frame rails.

HOISTS	CABLE SPECS.	PERMISSIBLE	NOMINAL CABLE LENGTH
Main Model PD12C	5/8 in. (16 mm) 18x19 Class Rotation Resistant Min. Breaking Strength 45,400 lbs.	9,080 lbs.	250 ft. (40' boom) 310 ft. (52' boom)
Main Model PD12C	5/8 in. (16 mm) 6x37 Class EIPS, IWRC Special Flexible Min. Breaking Strength 41,200 lbs.	9,080 lbs.	250 ft. (40' boom) 310 ft. (52' boom)

LINE PULLS AND REEVING INFORMATION

WEIGHT REDUCTIONS FOR LOAD HANDLING DEVICES

40 F I. M	AIN BOOM		
15' FIXED (NON	N-OFFSETTABLE)		
Erected	870 lb.		
Stowed	85 lb.		
15' OFFSETTABLE			
Erected	1420 lb.		
Stowed	260 lb.		
52 FT. MAIN BOOM			
15' FIXED (NON	N-OFFSETTABLE)		
Erected	870 lb.		
Stowed	160 lb.		
15' OFFSETTABLE			
Erected	1420 lb.		
Stowed	350 lb.		

1	HOOKBLOCKS and HEADACHE BALLS:				
	16.5 ton (15 MT) 2 Sheave (w/o quick reeve)	240 lb.			
	16.5 ton (15 MT), 2 Sheave (w/quick reeve)	241 lb.			
	11 ton (10 MT), 1 Sheave (w/quick reeve)	204 lb.			
	5 ton Overhaul Ball (w/ quick reeve)	148 lb.			

+Refer to rating plate for actual weight.

When lifting over swingaway and/or jib combinations, deduct total weight of all load handling devices reeved over main boom nose directly from swingaway or jib capacity.

NOTE: All load handling devices and boom attachments are considered part of the load and suitable allowances MUST BE MADE for their combined weights. Weights are for Grove furnished equipment.



Grove Worldwide - World Headquarters Western Hemisphere, Asia/Pacific

1565 Buchanan Trail East P.O. Box 21 Shady Grove, Pennsylvania 17256-0021, USA Tel: [Int + 1] (717) 597-8121 Fax: [Int + 1] (717) 597-4062

Grove Europe Limited*

Europe, Africa, Middle East (Sales & Marketing) 1 Emperor Way Doxford International Business Park Sunderland SR3 3XR, England Tel: [Int + 44] (191) 515-7253 Fax: [Int + 44] (191) 564-0442

Grove Europe Limited* UK & EIRE (Sales & Service) Telford Road, Bicester Oxfordshire OX6 0TZ, England Tel: [Int + 44] (1869) 878-890 Fax: [Int + 44] (1869) 878-891

Deutsche Grove GmbH Germany (Sales & Service) Helmholtzstrasse 12, Postfach 5026 D-40750 Langenfeld, Germany Tel: [Int + 49] (2173) 8809-0 Fax: [Int + 49] (2173) 8909-30

Deutsche Grove GmbH

Wilhelmshaven Works Industriegelande West, Postfach 1853 D-26358 Wilhelmshaven, Germany Tel: [Int + 49] (4421) 294-0 Fax: [Int + 49] (4421) 294-301

Grove France SAS France (Sales & Service) 16, Chaussèe Jules-Cèsar, 95520 OSNY B.P. 203, 95523 Cergy Pontoise France Tel: [Int + 33] (1) 303-13150 Fax: [Int + 33] (1) 303-86085

Grove Asia/Pacific - Representative Office

Asia/Pacific, Near East 171 Chin Swee Road #10-09 San Centre Singapore 16987 Tel: [Int + 65] 536-6112 Fax: [Int + 65] 536-6119

Grove China - Representative Office

Room 713, Towercrest Plaza No. 3 Mai Zi Dian West Road Chao Yang District Beijing, China 100016 Tel: [Int + 86] (10) 64 67 16 90 Fax: [Int + 86] (10) 64 67 16 91

Grove Middle East

P.O. Box 290 Dubai, United Arab Emirates Tel: [Int + 971] (4) 3484478 Fax: [Int + 971] (4) 3484478

Lifetime Customer Support

Western Hemisphere, Asia/Pacific 1086 Wayne Avenue Chambersburg, Pennsylvania 17201 USA Tel: [Int + 1] (717) 263-5100 Fax: [Int + 1] (717) 267-0404

Europe, Africa, Middle East Grove Europe Limited* 1 Emperor Way Doxford International Business Park Sunderland SR3 3XR, England Tel: [Int + 44] (191) 565-6281 Parts Fax: [Int + 44] (191) 515-7475 Service Fax: [Int + 44] (191) 515-7340

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