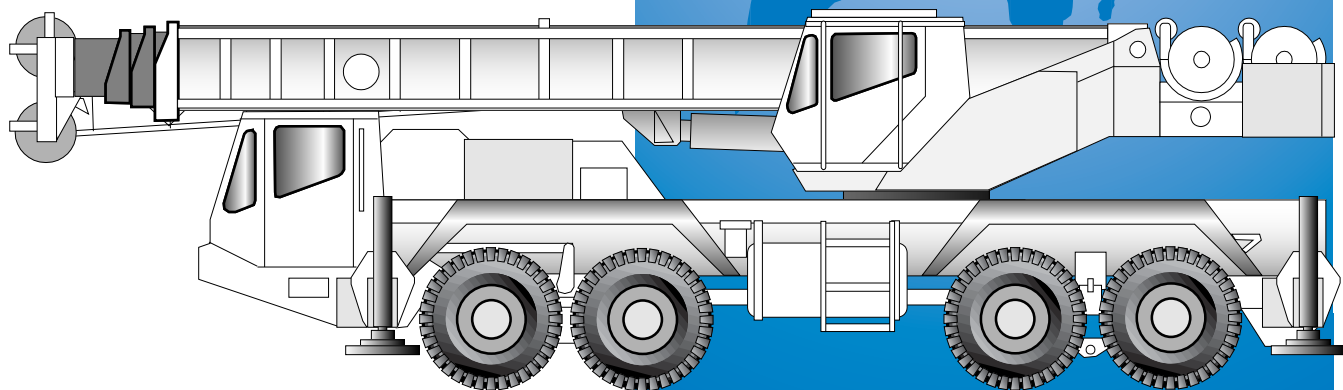


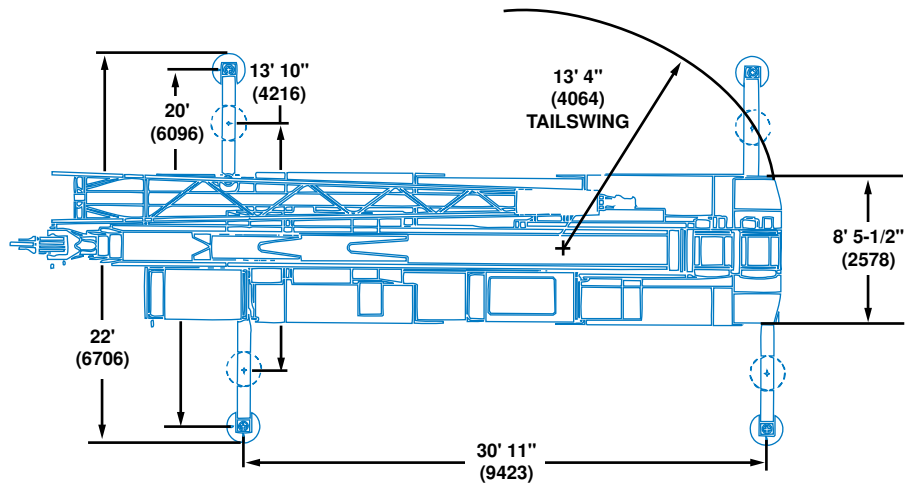


AT700D

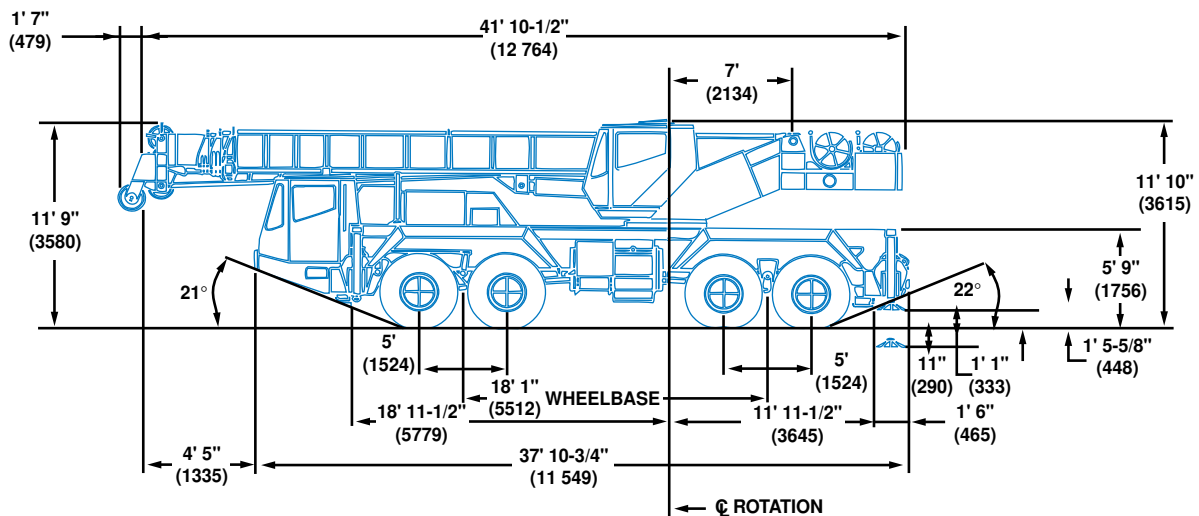


All Terrain Hydraulic Crane

Dimensions



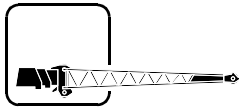
TURNING RADIUS w/16" Tires	
FRONT STEER	COORDINATED STEER
41' 8" (12 700)	24' 11" (7595)
TURNING RADIUS w/17.5" Tires & 445/80 Tires	
FRONT STEER	COORDINATED STEER
42' 9" (13 030)	25' 7" (7798)



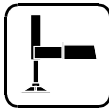
Working Range



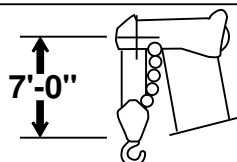
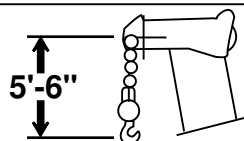
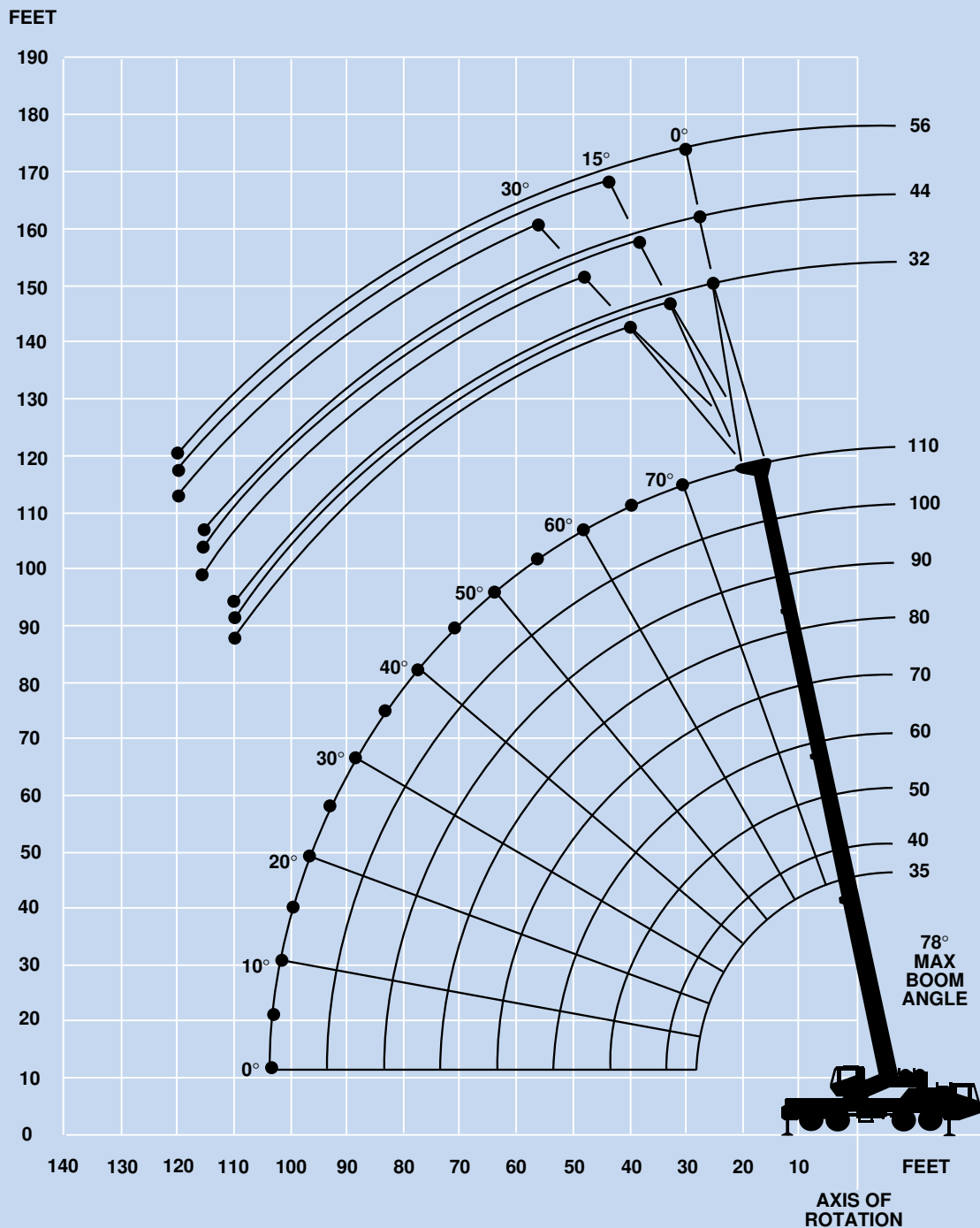
35-110 ft.
(10.6-33.5 m)



32-56 ft.
(9.8-17.1 m)



360°



DIMENSIONS ARE FOR LARGEST GROVE FURNISHED HOOK BLOCK AND HEADACHE BALL, WITH ANTI-TWO BLOCK ACTIVATED.

Superstructure specifications

Boom

35 ft. - 110 ft. (10.6 m - 33.5 m) four-section full power boom.

Maximum tip height: 118 ft. (35.9 m)

Telescopic Swingaway Extension

32 ft. to 44 ft. or 56 ft. (9.8 m to 13.4 m or 17.1 m) telescopic lattice swingaway extension offsettable at 0°, 15° or 30°. Stows alongside base boom section.

Maximum tip height: 173 ft. (52.7 m)

*Optional Fixed Swingaway Extension

32 ft. (9.8 m) lattice swingaway boom extension offsettable at 0°, 15° or 30°. Stows alongside base boom section.

Maximum tip height: 149 ft. (45.4 m)

Boom Nose

Four nylatron lower sheaves mounted on heavy duty tapered roller bearings with removable pin-type rope guards. *Optional removable auxiliary boom nose with removable pin type rope guard.

Boom Elevation

One double acting hydraulic cylinder with integral holding valve provides elevation from -1° to 78°.

Load Moment & Anti-Two Block System

Graphical load moment and anti-two block system with audio-visual warning and control lever lock-out. These systems provide electronic display of boom angle, length, radius, tip height, relative load moment, maximum permissible load and warning of impending two-block conditions.

Cab

Full vision, all steel fabricated with acoustical lining and tinted safety glass throughout. Deluxe seat incorporates armrest mounted hydraulic joystick controls. Dash panel incorporates gauges for all engine functions. Front steer indicator and rear steer lock indicator. Other standard features include: telescoping tilt steering wheel, sliding side and rear windows, electric windshield wash-wipe, circulating air fan, opening skylight with electric skylight wiper, swing horn, fire extinguisher, seat belt, ashtray and complete driving controls.

Swing

Planetary swing with foot applied multi-disc wet brake. Spring applied, hydraulically released parking brake and plunger type, 2 position, mechanical 360° house lock, operated from cab.

Maximum speed: 2.0 RPM.

Counterweight

Integral with superstructure. 6,850 lbs. (3107 kg)

Hydraulic System

6 section with a combined capacity of 204 G.P.M. (772 LPM) driven by carrier engine through P.T.O. Standard pump disconnect for travel.

Three individual valve banks.

Return line type filter with full flow by-pass protection and service indicator. Replaceable cartridge with micron filtration rating of 5/12/16.

218 gallon (825 L) reservoir.

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

System pressure test ports with fittings for each circuit.

HOIST SPECIFICATIONS Main and Auxiliary Hoist

Planetary reduction with automatic spring applied multi-disc brake. Power up and down equal speed. Grooved drum. Electronic hoist drum rotation indicator.

	<u>High Range</u>	<u>Low Range</u>
Maximum Single	430 FPM	227 FPM
Line Speed: (1st Layer)	(131 m/min)	(69 m/min)
	468 FPM	247 FPM
(2nd Layer)	(143 m/min)	(75 m/min)
	506 FPM	267 FPM
(3rd Layer)	(154 m/min)	(81 m/min)
	544 FPM	286 FPM
(4th Layer)	(166 m/min)	(87 m/min)
	582 FPM	306 FPM
(5th Layer)	(177 m/min)	(93 m/min)
Note: Speeds based on 72.2 GPM. Actual is 77 GPM (this will give lower speeds than actual).		
Maximum Single	9,080 lbs.	18,159 lbs.
Line Pull: (1st Layer)	(4119 kg)	(8237 kg)
	8,345 lbs.	16,691 lbs.
(2nd layer)	(3785 kg)	(7571 kg)
	7,721 lbs.	15,442 lbs.
(3rd layer)	(3502 kg)	(7004 kg)
	7,183 lbs.	14,367 lbs.
(4th layer)	(3258 kg)	(6517 kg)
	6,716 lbs.	13,432 lbs.
(5th layer)	(3046 kg)	(6093 kg)

Maximum Permissible Line Pull w/5:1 12,920 lbs.
(5860 kg)

Strength Factor: 3/4 in. (19 mm) 18 x 19 class

Maximum Rope Stowage: 508 ft (155 m)
3/4 in. (19 mm)

Note: 500 ft. (152.4 m) length wire rope supplied with basic standard unit.

**Denotes optional equipment*

Carrier specifications

Chassis

Box section frame fabricated from high strength alloy steel. Integral outrigger housings and front/rear lifting, towing and tie down lugs.

Outrigger System

Four hydraulic telescoping single stage, double box beam outriggers with inverted jack and integral holding valves. Three position setting. All steel fabricated, quick release type outrigger floats, 24 in. (610 mm) in diameter.

Maximum outrigger pad load: 67,592 lbs. (30 659 kg).

Outrigger Controls

Controls and crane level indicator located in superstructure cab and both sides of chassis.

Engine

Cummins M11 400E Plus diesel, six cylinders, turbocharged and after cooled, 661 cu. in. (10.8 L), 400 bhp (298 kW) (gross) @ 1,800 RPM.

Maximum torque: 1,450 ft. lbs. (1966 N·m) @ 1,200 RPM.

Fuel Tank Capacity

100 gallons (379 L).

Electrical System

Two 12 V - maintenance free batteries. 12 V lighting and 12 V starting.

Drive

8 x 8 x 8

Steering

Full independent power steering:

- Front: Mechanical with hydraulic power assist controlled by steering wheel.
- Rear: Full hydraulic hand lever controlled. Provides infinite variations of 4 main steering modes: front only, rear only, crab and coordinated. Mechanically locked for highway travel.

Transmission

6 speeds forward and 1 reverse. Fully automatic with engine mounted torque converter/transmission.

Transfer Case

Single speed w/air actuated front axle disconnect.

Axles

- Front: (2) Drive-steer with differential and planetary reduction hubs and differential locks.
- Rear: (2) Drive-steer with differential and planetary reduction hubs and differential locks.

Brakes

Dual line air system operating on all wheels. Spring-applied, air released. Parking brake acting on rear axles. Air dryer, Jacobs engine brake.

Tires

16.00R21 - 22PR on/off highway radials front and rear.

*Optional Tires

17.5 x 25

445/80R25 on/off highway radials all around.

Suspension

Hydrogas front and rear, hydraulic lockout and automatic leveling system operated from carrier cab.

Lights

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

Cab

One man design, all steel fabricated with acoustical lining and tinted safety glass throughout. Deluxe fabric covered, fully adjustable seat. Complete driving controls and engine instrumentation, including tilt telescope steering wheel, tachometer, speedometer, voltmeter, water temp., oil pressure, fuel level, dual air pressure gauges with A/V warning, engine high temp./low oil pressure A/V warning, suspension controls, and rear steering control. Other standard items include hot water heater/defroster, electric windshield wash/wipe, fire extinguisher, seat belt, door and window locks.

Maximum Speed

55 mph (90 kph)

Gradeability (Theoretical)

50% (Based on 86,750 lbs. [39 350 kg] GVW)

Gross Vehicle Weight

Typically equipped unit 85,625 lbs. (38 840 kg).

Miscellaneous Standard Equipment

Full width fenders, dual rear view mirrors, electronic back-up alarm, light package, sling/tool box, pump disconnect, engine distress A/V warning, tire inflation kit, worklights, air cleaner restriction indicator, emergency steering pump.

*Optional Equipment

- * Auxiliary hoist
- * 360° rotating beacon
- * Cab spotlight
- * Engine block heater
- * Hookblocks
- * Spare wheel assembly and stowage rack
- * Tool kit
- * Pintle hook - rear
- * Alum.-Mag. outrigger floats

**Denotes optional equipment*



35 -110 ft.
(10.6-33.5 m)



6,850 lbs.
(3107 kg)



100%



360°



85% Domestic (Pounds)

(Feet)	35	40	50	*60	70	80	90	100	110
9	@100,000								
9	90,000								
10	80,000	68,000	58,150						
12	67,400	63,800	55,450	44,600					
15	56,500	54,500	48,050	42,250	35,600	33,000			
20	44,000	43,000	39,400	33,600	30,500	28,000	25,500	23,300	
25	<u>33,500</u>	33,000	32,400	27,750	25,200	23,800	22,000	20,400	18,500
30		<u>26,500</u>	<u>26,500</u>	23,350	21,100	20,400	19,300	17,550	15,750
35			21,500	<u>20,000</u>	18,050	17,400	16,400	15,200	13,650
40			16,650	16,150	15,650	15,050	14,150	13,300	12,000
45				12,700	<u>13,600</u>	13,200	12,350	11,550	10,600
50				10,100	10,950	<u>11,600</u>	10,850	10,100	9,500
55					8,840	<u>9,520</u>	<u>9,630</u>	8,950	8,470
60					7,140	7,820	8,410	7,950	7,500
65						6,430	7,040	<u>7,080</u>	6,670
70						5,270	5,900	6,250	5,940
75							4,930	5,270	<u>5,300</u>
80							4,100	4,420	4,700
85								3,700	3,970
90								3,060	3,330
95									2,760
100									2,260
Minimum boom angle (degrees) for indicated length (no load)									0
Maximum boom length (feet) at 0 degree boom angle (no load)									110
*60 ft. boom length is with inner-mid extended and outer-mid & fly retracted.									

@Maximum lifting capacity of 100,000 lbs. over rear only within defined arc of 6° either side of centerline.

A6-829-009962



35 -110 ft.
(10.6-33.5 m)



6,850 lbs.
(3107 kg)



50%



360°



85% Domestic (Pounds)

(Feet)	35	40	50	*60	70	80	90	100	110
9	88,500								
10	80,000	68,000	58,150						
12	67,400	63,800	55,450	44,600					
15	<u>56,500</u>	<u>54,500</u>	<u>48,050</u>	<u>42,250</u>	35,600	33,000			
20	<u>37,000</u>	<u>35,700</u>	<u>33,150</u>	<u>31,150</u>	<u>30,500</u>	<u>28,000</u>	25,500	23,300	
25	24,650	24,150	23,150	22,050	22,200	22,150	<u>22,000</u>	<u>20,400</u>	18,500
30		16,500	16,050	15,600	16,700	16,850	<u>16,900</u>	<u>16,850</u>	<u>15,750</u>
35			11,750	11,400	12,600	13,150	13,300	13,350	13,350
40			8,850	8,460	9,490	10,100	10,500	10,800	10,850
45				6,280	7,180	7,820	8,280	8,710	8,900
50				4,610	5,410	6,040	6,550	6,950	7,250
55					4,000	4,640	5,140	5,550	5,840
60					2,860	3,490	3,970	4,410	4,700
65						2,550	3,000	3,440	3,740
70						1,750	2,190	2,620	2,920
75							1,500	1,920	2,220
80								1,320	1,620
85									1,090
Minimum boom angle (degrees) for indicated length (no load)									33.5
Maximum boom length (feet) at 0 degree boom angle (no load)									80
*60 ft. boom length is with inner-mid extended and outer-mid & fly retracted.									

A6-829-012169



35 -110 ft.
(10.6-33.5 m)



6850 lbs.
(3107 kg)



0%



360°



75% Domestic (Pounds)

(Feet)	35	40	50	*60	70	80	90	100	110
9	53,300								
10	46,200	43,750	39,800						
12	36,100	34,300	31,350	29,000					
15	25,100	24,200	23,100	21,400	21,300	21,000			
20	15,200	14,750	14,300	13,850	14,150	14,200	14,200	14,050	
25	10,000	9,810	9,370	9,050	9,630	9,880	10,150	10,200	10,150
30		6,730	6,300	5,970	6,530	6,810	7,430	7,550	7,610
35			4,220	3,880	4,420	4,730	5,300	5,610	5,720
40			2,720	2,370	2,900	3,220	3,680	4,060	4,280
45				1,050	1,750	2,080	2,450	2,830	3,070
50						1,190	1,490	1,860	2,110
55								1,090	1,340
Minimum boom angle (degrees) for indicated length (no load)									56
Maximum boom length (feet) at 0 degree boom angle (no load)									50
*60 ft. boom length is with inner-mid extended and outer-mid & fly retracted.									

A6-829-012171



35 -110 ft.
(10.6-33.5 m)



32 ft.
(9.8 m)



6,850 lbs.
(3107 kg)



100%



360°



85% Domestic (Pounds)

(Feet)	0°	15°	30°
30	9,880		
35	9,090	*7,880	
40	8,380	7,450	*6,180
45	7,720	7,140	6,070
50	7,120	6,850	5,820
55	6,570	6,590	5,590
60	5,880	6,350	5,390
65	5,230	5,660	5,200
70	4,650	5,050	5,030
75	4,120	4,490	4,800
80	3,640	3,980	4,260
85	3,190	3,500	3,760
90	2,790	3,070	3,300
95	2,410	2,670	2,870
100	2,070	2,300	2,480
105	1,750	1,960	2,110
110	1,450	1,630	1,760

*This capacity is based upon the maximum boom angle.

A6-829-009600E



35 -110 ft.
(10.6-33.5 m)



32-56 ft.
(9.8-17.1 m)



6,850 lbs.
(3107 kg)



100%



360°



85% Domestic (Pounds)

(Feet)	32 ft. LENGTH			44 ft. LENGTH			56 ft. LENGTH		
	0°	15°	30°	0°	15°	30°	0°	15°	30°
30	9,500								
35	8,710	*7,500		7,320					
40	8,000	7,070	*5,800	6,880			5,560		
45	7,340	6,760	5,690	6,490	5,060		5,250		
50	6,740	6,470	5,440	6,140	4,840	*3,770	4,970	3,900	
55	6,190	6,210	5,210	5,820	4,650	3,600	4,710	3,740	
60	5,500	5,970	5,010	5,530	4,460	3,450	4,480	3,600	2,650
65	4,850	5,280	4,820	5,220	4,300	3,320	4,270	3,410	2,540
70	4,270	4,670	4,650	4,640	4,140	3,190	4,070	3,220	2,430
75	3,740	4,110	4,420	4,110	3,940	3,070	3,890	3,050	2,340
80	3,260	3,600	3,880	3,640	3,750	2,970	3,720	2,890	2,250
85	2,810	3,120	3,380	3,200	3,570	2,870	3,530	2,750	2,170
90	2,410	2,690	2,920	2,800	3,190	2,780	3,130	2,620	2,100
95	2,030	2,290	2,490	2,430	2,790	2,700	2,760	2,500	2,030
100	1,690	1,920	2,100	2,080	2,420	2,630	2,420	2,390	1,970
105	1,370	1,580	1,730	1,770	2,070	2,320	2,110	2,290	1,910
110	<u>1,070</u>	<u>1,250</u>	<u>1,380</u>	1,470	1,750	1,970	1,820	2,180	1,860
115				<u>1,200</u>	<u>1,450</u>	<u>1,640</u>	1,540	1,880	1,810
120							<u>1,290</u>	<u>1,600</u>	<u>1,670</u>

*This capacity is based upon maximum boom angle.

A6-829-009539F



35 -110 ft.
(10.6-33.5 m)



32-56 ft.
(9.8-17.1 m)



6,850 lbs.
(3107 kg)



50%



360°



85% Domestic (Pounds)

(Feet)	32 ft. LENGTH			44 ft. LENGTH			56 ft. LENGTH		
	0°	15°	30°	0°	15°	30°	0°	15°	30°
30	9,500								
35	8,710	*7,500		7,320					
40	8,000	7,070	*5,800	6,880			5,560		
45	<u>7,340</u>	6,760	5,690	6,490	5,060		5,250		
50	6,580	<u>6,470</u>	5,440	6,140	4,840	*3,770	4,970	3,900	
55	5,370	5,370	<u>5,210</u>	<u>5,820</u>	4,650	3,600	4,710	3,740	
60	4,360	4,360	<u>4,360</u>	<u>4,820</u>	<u>4,460</u>	3,450	4,480	3,600	2,650
65	3,500	3,500	3,500	3,970	3,970	3,320	<u>4,270</u>	3,410	2,540
70	2,760	2,760	2,760	3,240	3,240	<u>3,190</u>	<u>3,640</u>	<u>3,220</u>	2,430
75	2,130	2,130	2,130	2,610	2,610	2,610	3,010	3,010	2,340
80	1,570	1,570	1,570	2,050	2,050	2,050	2,460	2,460	<u>2,250</u>
85	1,070	1,070	1,070	1,560	1,560	1,560	1,970	1,970	1,970
90				1,120	1,120	1,120	1,530	1,530	1,530
95							1,140	1,140	1,140

*This capacity is based upon maximum boom angle.

A6-829-012327A



35 -110 ft.
(10.6-33.5 m)



6,850 lbs.
(3107 kg)



360°



17.5R25XHC
445/80R25 VGT
16.00R21 AT-2A
Stationary



(Feet)



75% Domestic (Pounds)

	35	40	50	*60
10	31,650	31,650		
12	21,350	21,350		
15	14,300	14,300	14,300	
20	9,220	9,220	9,220	9,220
25	<u>6,760</u>	6,760	6,760	6,760
30		<u>4,260</u>	4,260	4,260
35			2,150	2,150
40			<u>1,060</u>	<u>1,060</u>



35 -110 ft.
(10.6-33.5 m)



6,850 lbs.
(3107 kg)



Defined Arc
Over Rear



17.5R25XHC
445/80R25 VGT
16.00R21 AT-2A
Stationary



(Feet)



75% Domestic (Pounds)

	35	40	50	*60	70	80	90
10	40,000	40,000					
12	32,150	32,150					
15	24,900	24,900	24,900				
20	18,200	18,200	18,200	18,200	11,700	8,310	
25	<u>14,350</u>	14,350	14,350	14,350	11,700	8,310	
30		<u>11,600</u>	11,600	11,600	11,600	8,310	
35			9,220	9,220	9,220	8,310	
40			<u>7,400</u>	7,400	7,400	7,400	5,180
45				5,970	5,970	5,970	5,180
50				<u>4,810</u>	4,810	4,810	4,810
55					3,650	3,650	3,650
60					<u>2,630</u>	2,630	2,630
65						1,920	1,920
70						<u>1,400</u>	1,400
75							<u>1,000</u>

A6-829-009607C & -009606C



35 - 110 ft.
(10.6-33.5 m)



6,850 lbs.
(3107 kg)



Pick & Carry
Up to 2.5 MPH



Centered
Over Rear



(Feet)



75% Domestic (Pounds)

	35	40	50	*60	70	80	90
10	45,500	45,500					
12	39,400	39,400	39,400				
15	32,450	32,450	32,450				
20	24,550	24,550	24,550	24,550			
25	<u>19,250</u>	19,250	19,250	19,250	17,200	10,050	5,180
30		<u>14,900</u>	14,900	14,900	14,900	10,050	5,180
35			11,450	11,450	11,450	10,050	5,180
40			<u>9,230</u>	9,230	9,230	9,230	5,180
45				7,630	7,630	7,630	5,180
50				<u>5,960</u>	6,440	6,440	5,180
55					5,240	5,520	5,180
60					<u>4,170</u>	4,560	4,560
65						3,580	3,580
70						<u>2,570</u>	2,570
75							<u>1,530</u>

*60 ft. boom length is with inner-mid extended and outer-mid & fly retracted.

A6-829-009608C



35 -110 ft.
(10.6-33.5 m)




6,850 lbs.
(3107 kg)



100%



360°

					85% Domestic (Pounds)				
Boom Angle	35	40	50	*60	70	80	90	100	110
0°	15,500	12,250	7,860	4,970	3,670	2,710	1,960	1,360	880



35 -110 ft.
(10.6-33.5 m)



6,850 lbs.
(3107 kg)



Stationary



Defined Arc
Over Rear

75% Domestic (Pounds)						
Boom Angle	35	40	50	*60	70	80
0°	<u>12,800</u>	<u>10,050</u>	<u>6,500</u>	<u>4,250</u>	<u>2,170</u>	<u>1,100</u>



35 -110 ft.
(10.6-33.5 m)



6,850 lbs.
(3107 kg)



Stationary



360°

75% Domestic (Pounds)		
Boom Angle	35	40
0°	<u>5,840</u>	<u>2,810</u>



35 -110 ft.
(10.6-33.5 m)



6,850 lbs.
(3107 kg)



Pick & Carry
Up to 2.5 MPH



Centered
Over Rear

75% Domestic (Pounds)						
Boom Angle	35	40	50	*60	70	80
0°	<u>15,500</u>	<u>12,250</u>	<u>7,860</u>	<u>4,970</u>	<u>3,610</u>	<u>1,950</u>

*60 ft. boom length is with inner-mid extended and outer-mid & fly retracted

A6-829-009610B

NOTES:

Rated Lifting Capacities

IMPORTANT NOTES:

WARNING: THIS CHART IS ONLY A GUIDE.

The notes below are for illustration only and should not be relied upon to operate the crane. The individual crane's load chart, operating instructions and other instruction plates must be read and understood prior to operating the crane.

1. All rated loads have been tested to and meet minimum requirements of SAEJ1063 OCT80 - Cantilevered Boom Crane Structures - Method of Test, and do not exceed 85% of the tipping load on outriggers fully and 50% extended, and 75% of the tipping load on outriggers 0% extended (fully retracted) as determined by SAEJ765 OCT80 Crane Stability Test Code.

2. Capacities given do not include the weight of hook blocks, slings, auxiliary lifting equipment and load handling devices. Their weights **MUST** be added to the load to be lifted. When more than minimum required reeving is used, the additional rope weight shall be considered part of the load.





































3. Capacities appearing above the bold line are based on structural strength and tipping should not be relied upon as a capacity limitation.

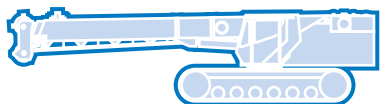
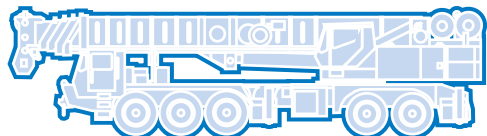
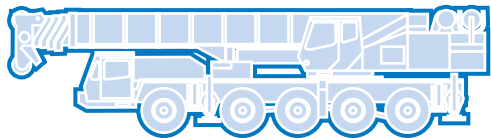
4. All capacities are for crane on firm, level surface. It may be necessary to have structural supports under the outrigger floats to spread the load to a larger bearing surface.

5. When either boom length or radius or both are between values listed, the smallest load shown at either the next larger radius or boom length shall be used.

6. For outrigger operation, ALL outriggers shall be properly extended with tires raised free of ground before raising the boom or lifting loads.

Symbols Glossary

	Frame		Steering
	Outriggers		Transmission
	Outrigger Controls		Axles
	Engine		Brakes
	Fuel Tank Capacity		Tires
	Electrical System		Suspension
	Drive		Rotation
	Lights		Boom Elevation
	Cab		Swing
	Boom		Counterweight
	Fixed Swingaway		Oil
	Tele-Swingaway		Hydraulic System
	Jib		Hoist
	Boom Nose		Radius
	Boom Extension		Boom Length
	Speed		Hookblock
	Grade		Gear
	Lattice Extension		Luffing Jib



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