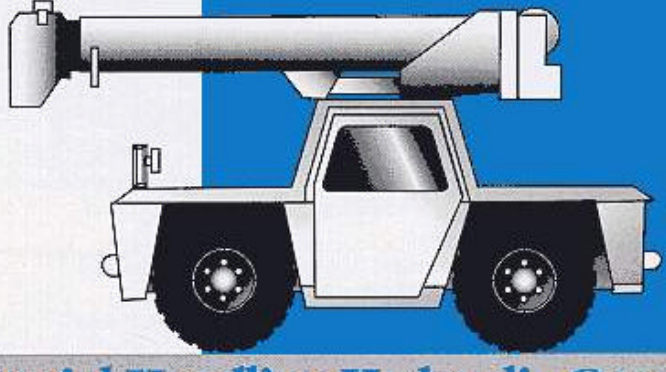
GROVE CRANE
A GROVE WORLDWIDE COMPANY

AP308



Material Handling Hydraulic Crane

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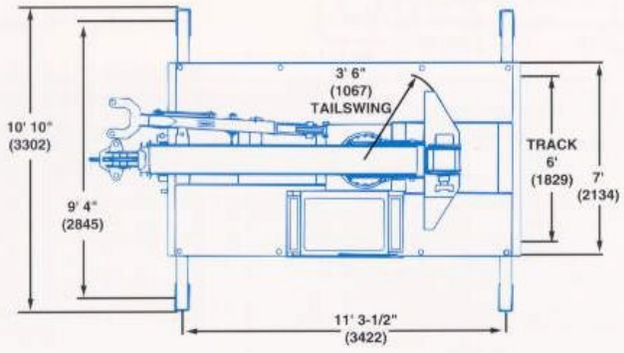
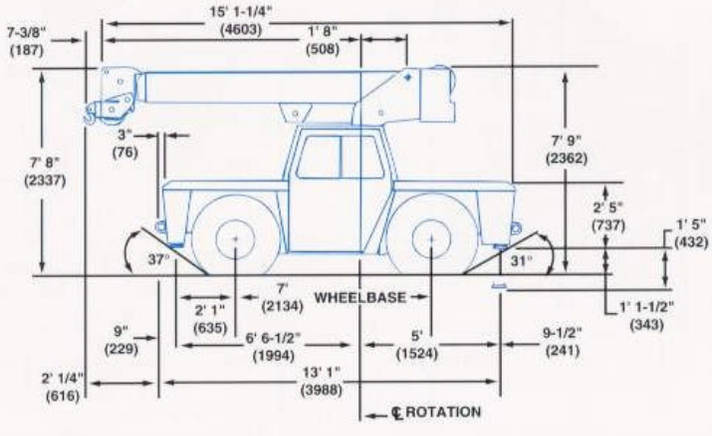
Dimensions





Turning Radius	15' 3" (4658 mm)
Front Axle Load	6,731 lbs. (3053 kg)
Rear Axle Load	8,730 lbs. (3960 kg)
Gross Vehicle Weight	15,461 lbs. (7013 kg)

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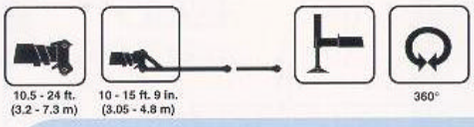
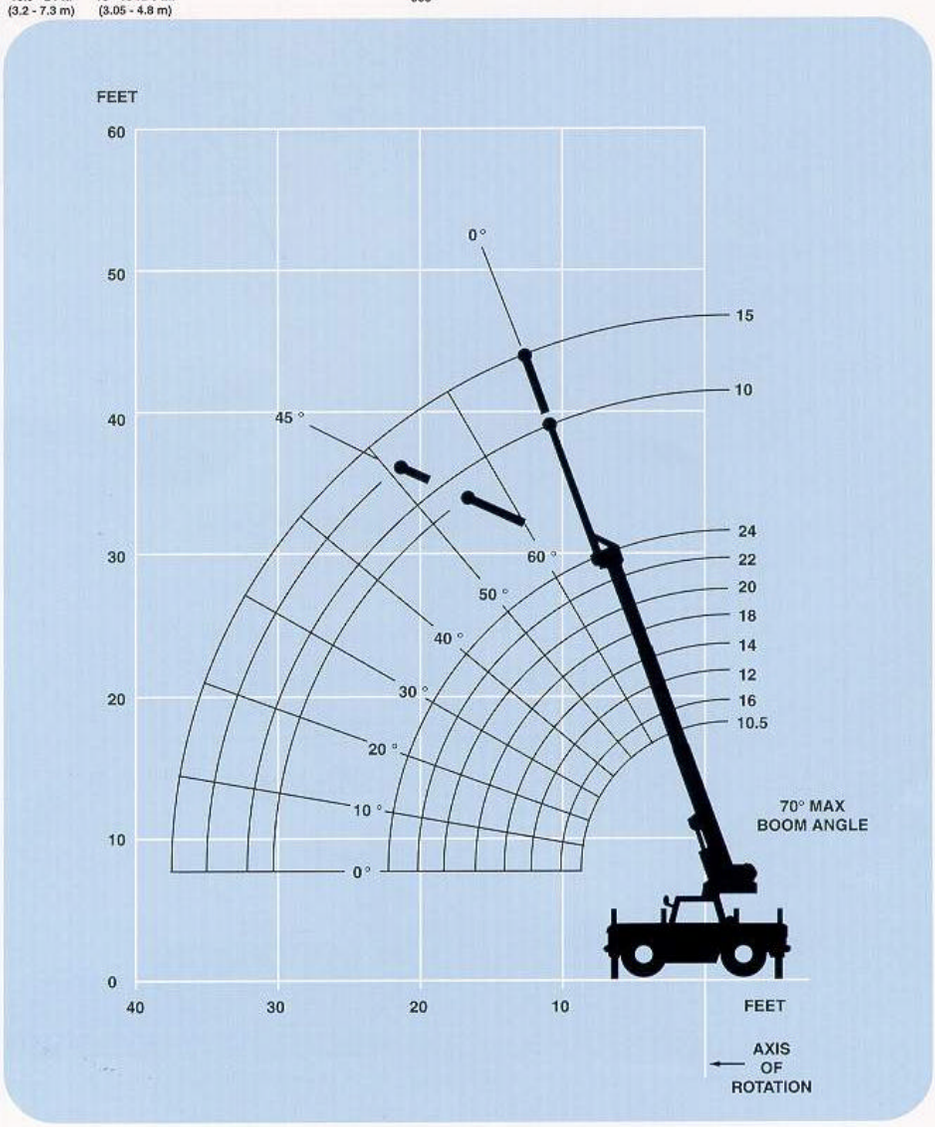
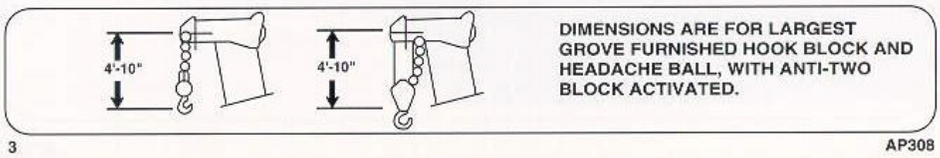
Working Range







AP308

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Superstructure specifications

Boom
10.5 ft. - 24 ft. (3.2 m - 7.3 m) three-section full power boom.
Maximum tip height: 29 ft. (8.8 m).

Fixed Swingaway Extension
10 ft. (3.05 m) swingaway extension. Offsettable at 0° or 45°. Stows alongside base boom section.
Maximum tip height: 39 ft. (11.9 m).

*Optional Telescopic Swingaway Extension
10 ft. - 15 ft. (3.05 m - 4.5 m) telescoping swingaway extension. Offsettable at 0° or 45°. Stows alongside base boom section.
Maximum tip height: 44 ft. (13.4 m).

Boom Nose
Two lower steel sheaves and one idler sheave mounted on bronze bushings with removable pin-type rope guards.

*Optional Searcher Hook
Boom nose mounted. 3,000 lbs. (1316 kg) capacity.

Boom Elevation
One double acting hydraulic cylinder with integral holding valve provides elevation from 0° to 70°.

Load Moment & Anti-Two Block System
Standard load moment and anti-two block system with audio-visual warning and control lever lockout. These systems provide electronic display of boom angle, length, radius, tip height, relative load moment, maximum permissible load and load indication and warning of impending two-block condition.

Cab
Standard frame mounted control station includes all crane function and driving controls, engine monitoring instrumentation and deluxe fabric seat with seat belt. Standard full vision, all steel fabricated enclosed cab with tinted safety glass throughout. Dash panel incorporates gauges for all engine functions. Other features include skylight, sliding left & right side windows, electric windshield washer-wiper, circulating air fan and fire extinguisher.

Swing
Ball bearing swing circle with 360° continuous rotation. Grove planetary glide-swing with automatic type multi-disc brake.
Maximum speed: 1.5 RPM.

Counterweight
2,100 lbs. (952 kg) integral with superstructure.

Hydraulic System
Two main gear pumps with a combined capacity of 54.4 GPM (205.7 LPM), driven by carrier engine through PTO.

Two individual valve banks.

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

30 gallon (114 L) reservoir.

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

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

HOIST SPECIFICATIONS
Main and Auxiliary Hoist
Planetary reduction with automatic spring applied multi-disc brake and hoist drum cable followers.

Maximum Single Line Pull:	9,580 lbs. (4345 kg)
Maximum Single Line Speed:	145 FPM (44 m/min)
Maximum Permissible Line Pull:	7,400 lbs. (3356 kg)
Rope Diameter:	9/16 in. (14 mm)
Rope Length:	130 ft. (39.6 m)
Maximum Rope Stowage:	181 ft. (55.2 m)

**Denotes optional equipment*

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Carrier specifications

Chassis
High strength alloy steel construction with integral outrigger housings and front/rear lifting, towing and tie down lugs.
Carry deck with surface area of 62 sq. ft. (5.8m2)

Outrigger System
Front and rear oblique type telescoping beams at all four corners with integral holding valves. Outrigger pads are an integral part of the beam and have a surface area of 72 sq. in. (464 cm2).
Maximum outrigger pad load 15,000 lbs. (6804 kg).

Outrigger Controls
Controls and crane level indicator located in cab.

Engine
Cummins 4B3.9L diesel, four cylinders, 76 bhp (57 kW) (Gross) @ 2,500 RPM.
Maximum torque: 184 ft. lbs. (250 Nm) @ 1,200 RPM.

*Optional Engine
Continental TM 2.7L, four cylinders, 2.7L gasoline engine, 66 bhp (49 kW) (Gross) @ 2,800 RPM.
Maximum torque: 144 ft. lbs. (195 Nm) @ 1,800 RPM.

Fuel Tank Capacity
30 gallons (114 L)

Transmission
Automatic with 3 speeds forward and 1 reverse with torque converter.

Electrical System
One 12 V - maintenance free battery. 12 V starting.

Drive
4 x 2

Steering
Rear: Full hydraulic power, controlled by steering wheel.

Axles
Front: Drive-type with no spin differential and planetary reduction hubs rigid mounted to chassis.
Rear: Steer-type rigid mounted to frame.

Brakes
Hydraulic drum and shoe type acting on front drive wheels. Mechanical hand lever actuated parking brake.

Tires
10.00 x 15-16 PR tube type, deep mine lug.

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

Maximum Speed
17 MPH (27 kph) with automatic transmission.
*29 MPH (46.7 kph) with manual transmission.

Gradeability (Theoretical)
65.6% (Based on 15,461 lbs. [7013 kg] GVW).

Miscellaneous Standard Equipment
Dual rear view mirrors, hookblock tiedown sling, electronic back-up alarm, light package and stowage well.

*Optional Equipment
- Worklights
- 360° Flashing light
- Cab spotlight
- Tachometer
- Cold start aid (less canister)
- Engine block heater
- Maintenance platform
- Hookblocks
- Tow winch
- Tool kit
- Pintle hook front/rear
- Carry deck posts
- LP gas conversion kit (less bottle)
- Engine low oil pressure/high water temperature A/V warning system
- Spark arrestor muffler
- Sound suppression kit
- Hot water heater and forced air defroster
- Optional hydraulic brakes acting on all four wheels.
- Manual Transmission 4 x 4

Denotes optional equipment

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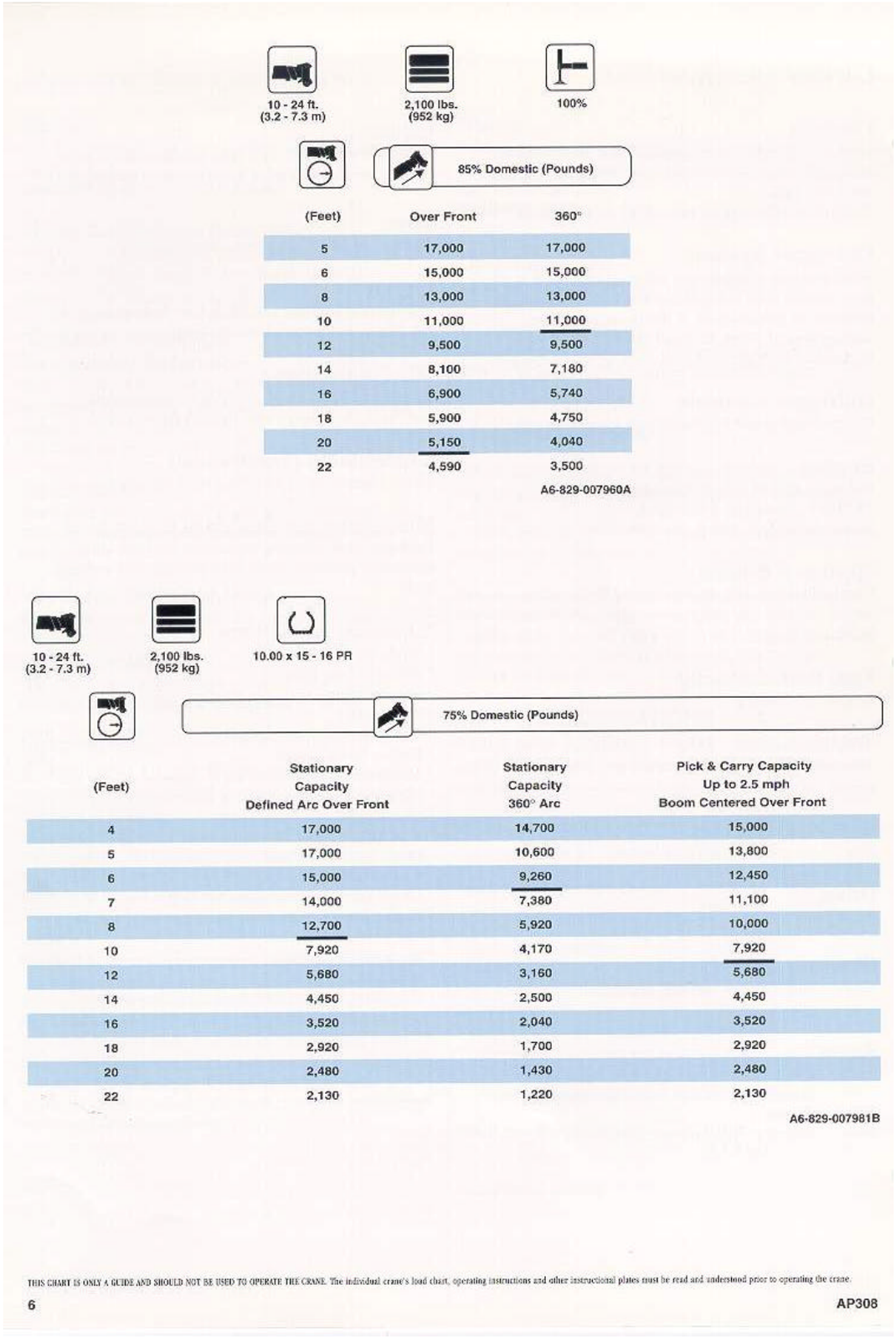

10 - 24 ft. (3.2 - 7.3 m) | 2,100 lbs. (952 kg) | 100%

85% Domestic (Pounds)

(Feet)	Over Front	360°
5	17,000	17,000
6	15,000	15,000
8	13,000	13,000
10	11,000	11,000
12	9,500	9,500
14	8,100	7,180
16	6,900	5,740
18	5,900	4,750
20	5,150	4,040
22	4,590	3,500

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10 - 24 ft. (3.2 - 7.3 m) | 2,100 lbs. (952 kg) | 10.00 x 15 - 16 PR

75% Domestic (Pounds)

(Feet)	Stationary Capacity Defined Arc Over Front	Stationary Capacity 360° Arc	Pick & Carry Capacity Up to 2.5 mph Boom Centered Over Front
4	17,000	14,700	15,000
5	17,000	10,600	13,800
6	15,000	9,260	12,450
7	14,000	7,380	11,100
8	12,700	5,920	10,000
10	7,920	4,170	7,920
12	5,680	3,160	5,680
14	4,450	2,500	4,450
16	3,520	2,040	3,520
18	2,920	1,700	2,920
20	2,480	1,430	2,480
22	2,130	1,220	2,130

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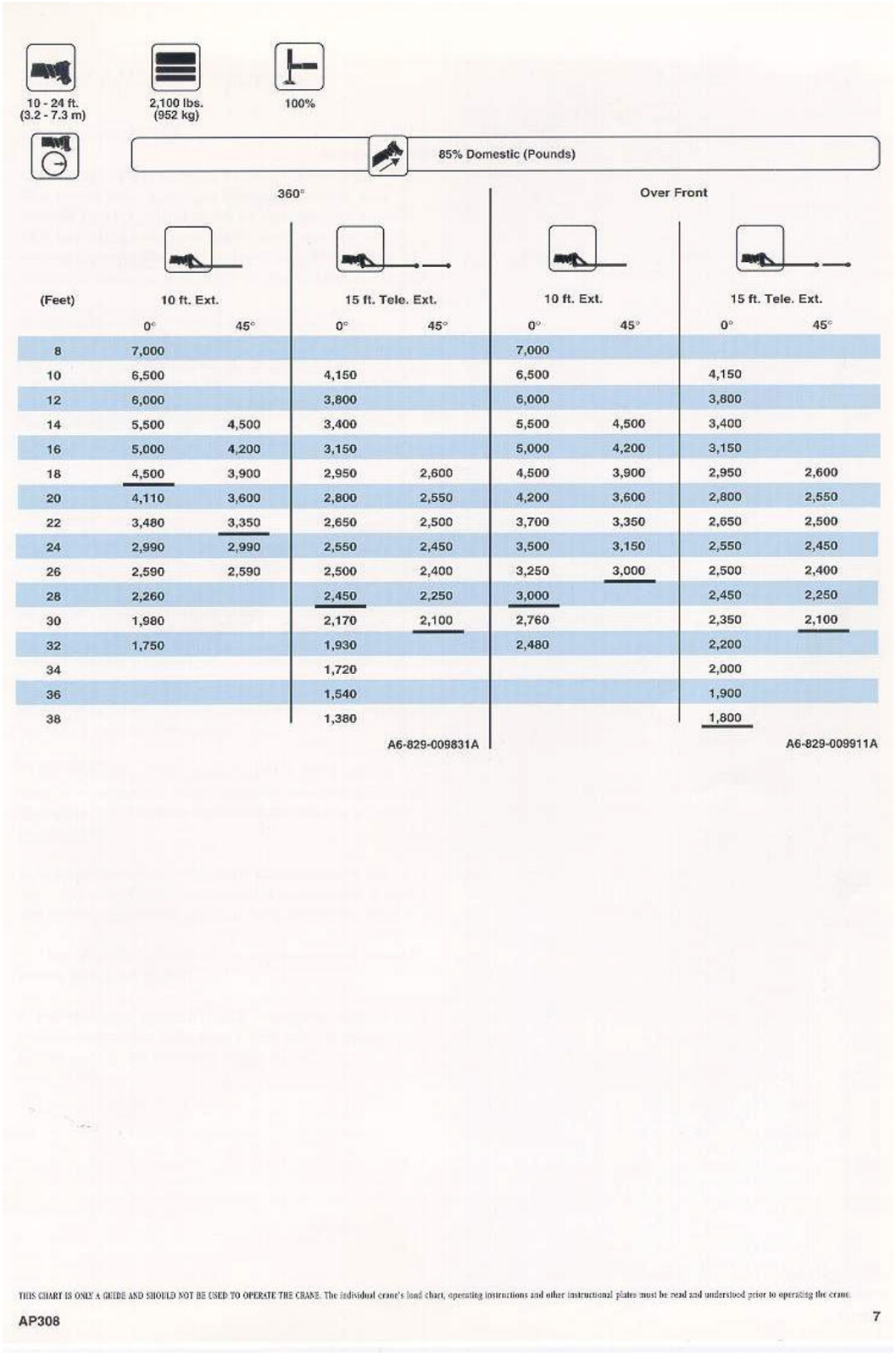
THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE. The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.

ap3087 (747x1132x24b jpeg)



10 - 24 ft. (3.2 - 7.3 m)

2,100 lbs. (952 kg)

100%

85% Domestic (Pounds)

(Feet)	360° 10 ft. Ext. 0°	360° 10 ft. Ext. 45°	360° 15 ft. Tele. Ext. 0°	360° 15 ft. Tele. Ext. 45°	Over Front 10 ft. Ext. 0°	Over Front 10 ft. Ext. 45°	Over Front 15 ft. Tele. Ext. 0°	Over Front 15 ft. Tele. Ext. 45°
8	7,000				7,000			
10	6,500		4,150		6,500		4,150	
12	6,000		3,800		6,000		3,800	
14	5,500	4,500	3,400		5,500	4,500	3,400	
16	5,000	4,200	3,150		5,000	4,200	3,150	
18	4,500	3,900	2,950	2,600	4,500	3,900	2,950	2,600
20	4,110	3,600	2,800	2,550	4,200	3,600	2,800	2,550
22	3,480	3,350	2,650	2,500	3,700	3,350	2,650	2,500
24	2,990	2,990	2,550	2,450	3,500	3,150	2,550	2,450
26	2,590	2,590	2,500	2,400	3,250	3,000	2,500	2,400
28	2,260		2,450	2,250	3,000		2,450	2,250
30	1,980		2,170	2,100	2,760		2,350	2,100
32	1,750		1,930		2,480		2,200	
34			1,720				2,000	
36			1,540				1,900	
38			1,380				1,800	

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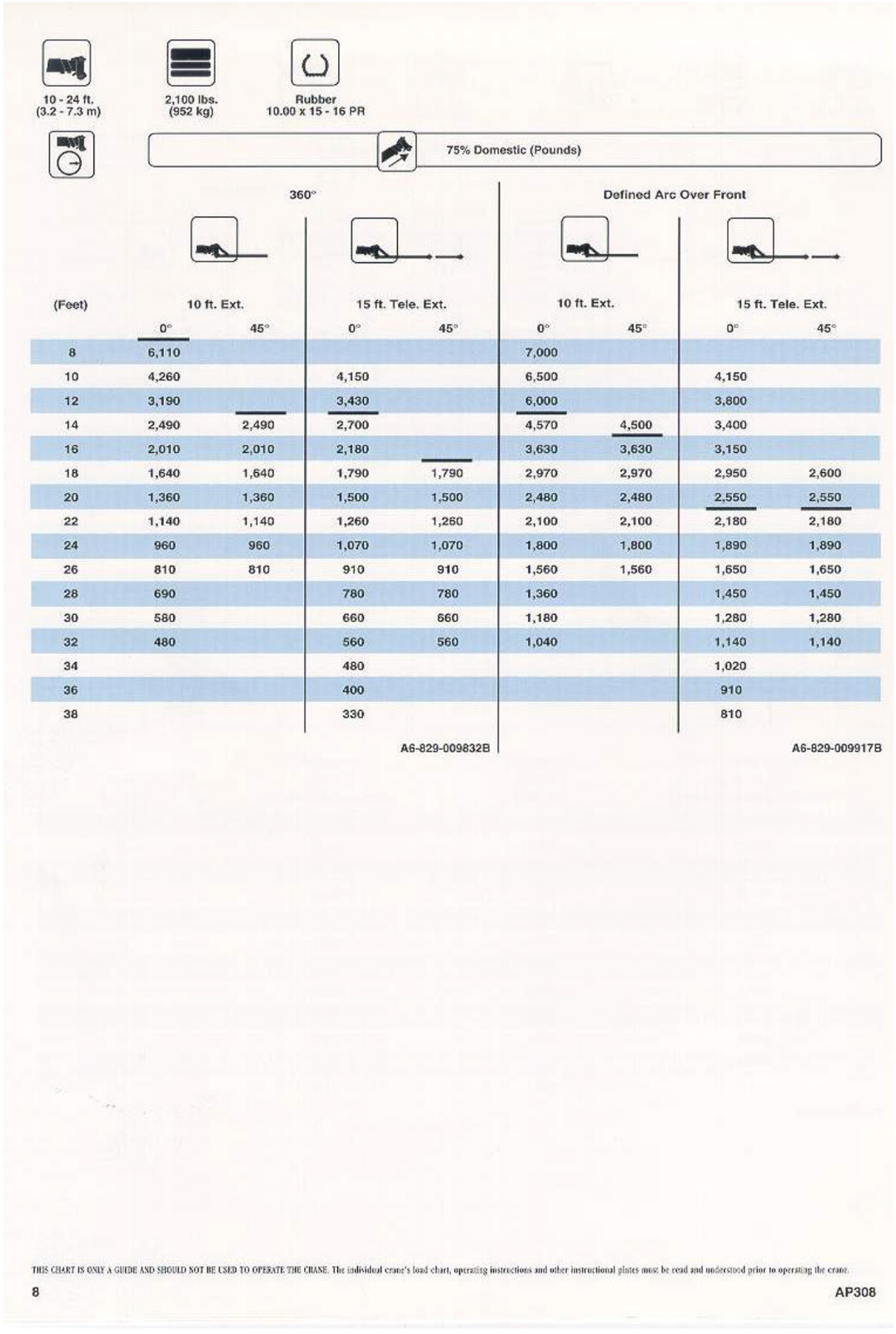
ap3088 (760x1132x24b jpeg)



10 - 24 ft. (3.2 - 7.3 m)

2,100 lbs. (952 kg)

Rubber 10.00 x 15 - 16 PR

75% Domestic (Pounds)

	360°				Defined Arc Over Front			
(Feet)	10 ft. Ext.		15 ft. Tele. Ext.		10 ft. Ext.		15 ft. Tele. Ext.	
	0°	45°	0°	45°	0°	45°	0°	45°
8	6,110				7,000			
10	4,260		4,150		6,500		4,150	
12	3,190		3,430		6,000		3,800	
14	2,490	2,490	2,700		4,570	4,500	3,400	
16	2,010	2,010	2,180		3,630	3,630	3,150	
18	1,640	1,640	1,790	1,790	2,970	2,970	2,950	2,600
20	1,360	1,360	1,500	1,500	2,480	2,480	2,550	2,550
22	1,140	1,140	1,260	1,260	2,100	2,100	2,180	2,180
24	960	960	1,070	1,070	1,800	1,800	1,890	1,890
26	810	810	910	910	1,560	1,560	1,650	1,650
28	690		780	780	1,360		1,450	1,450
30	580		660	660	1,180		1,280	1,280
32	480		560	560	1,040		1,140	1,140
34			480				1,020	
36			400				910	
38			330				810	

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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 SAE J1063 OCT90 - Cantilevered Boom Crane Structures - Method of Test, and do not exceed 85% of the tipping load on outriggers fully extended 75% tipping on rubber, as determined by SAE J765 OCT90 Crane Stability Test Code.

2. Rated loads include the weight of hookblock, slings and auxiliary lifting devices and their weights shall be subtracted from the listed rating to obtain the net load to be lifted. When more than the minimum required hoist reeving is used, the additional rope weight shall be considered part of the load to be handled.

3. Defined Arc ±6° on either side of longitudinal centerline of machine.

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

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

6. 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.

7. Tires shall be inflated to the recommended pressure before lifting on rubber.

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

Symbols Glossary

AP308

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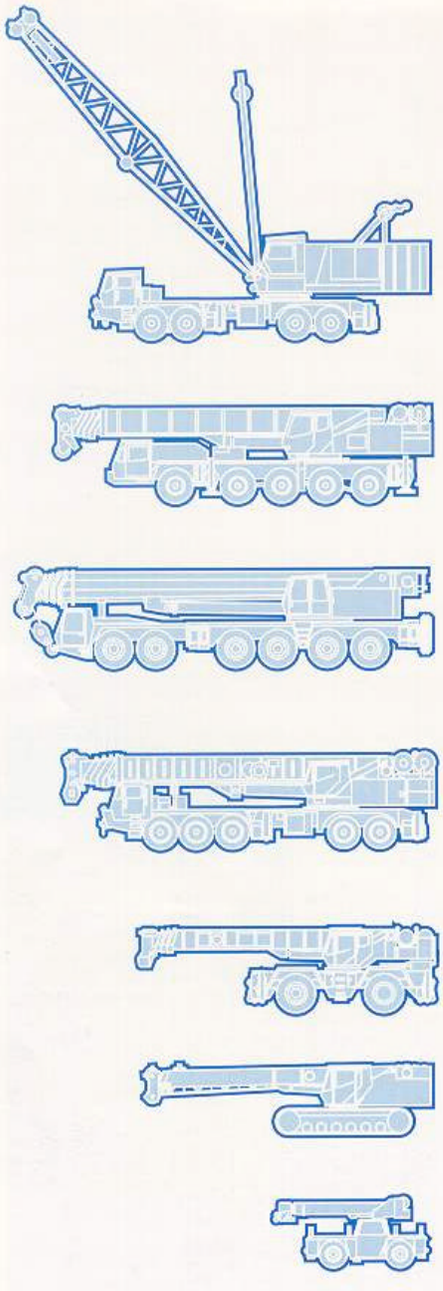

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