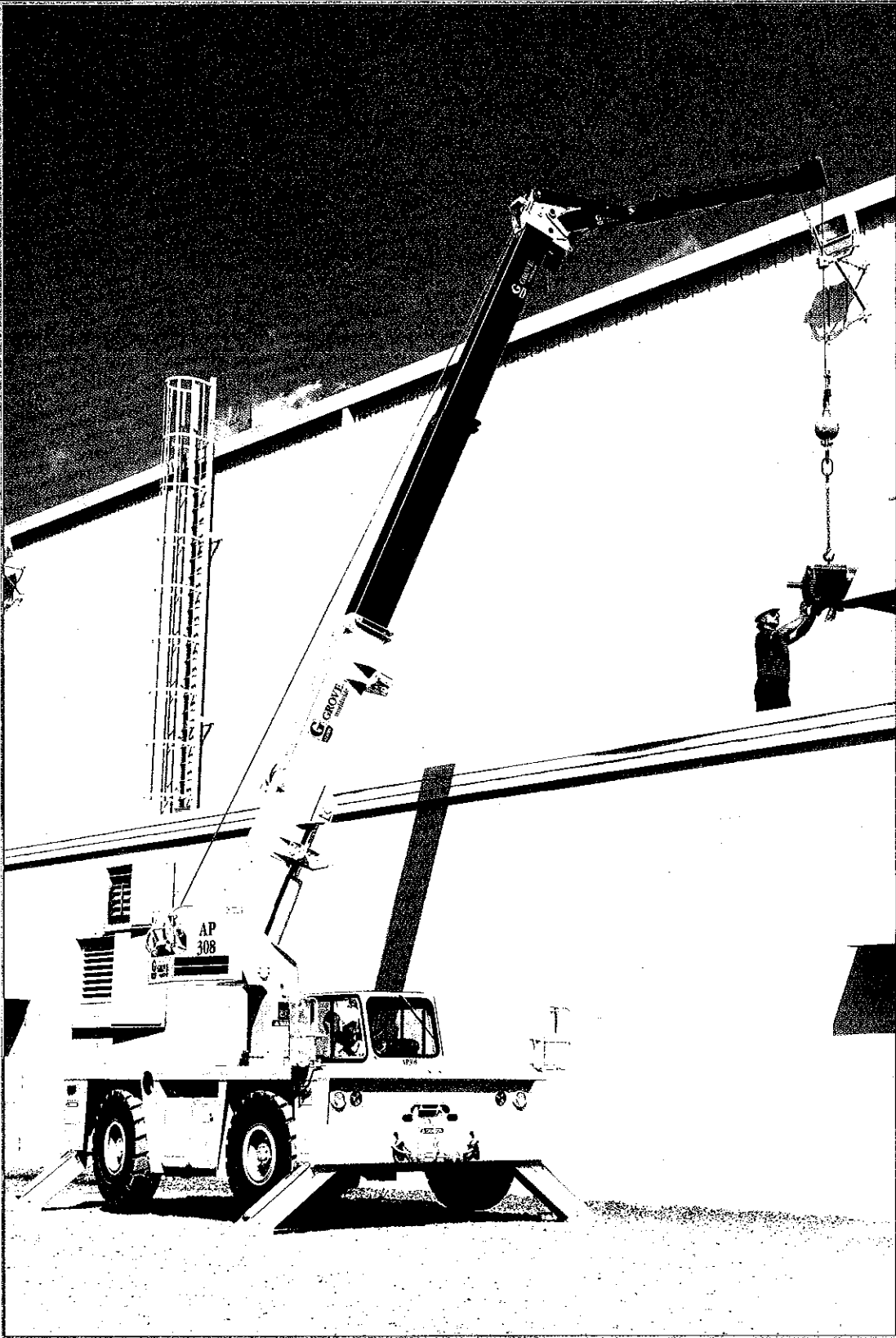
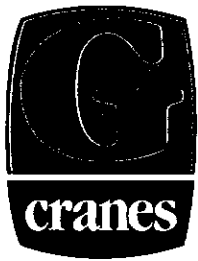


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Material Handling Hydraulic Crane Specifications

AP308

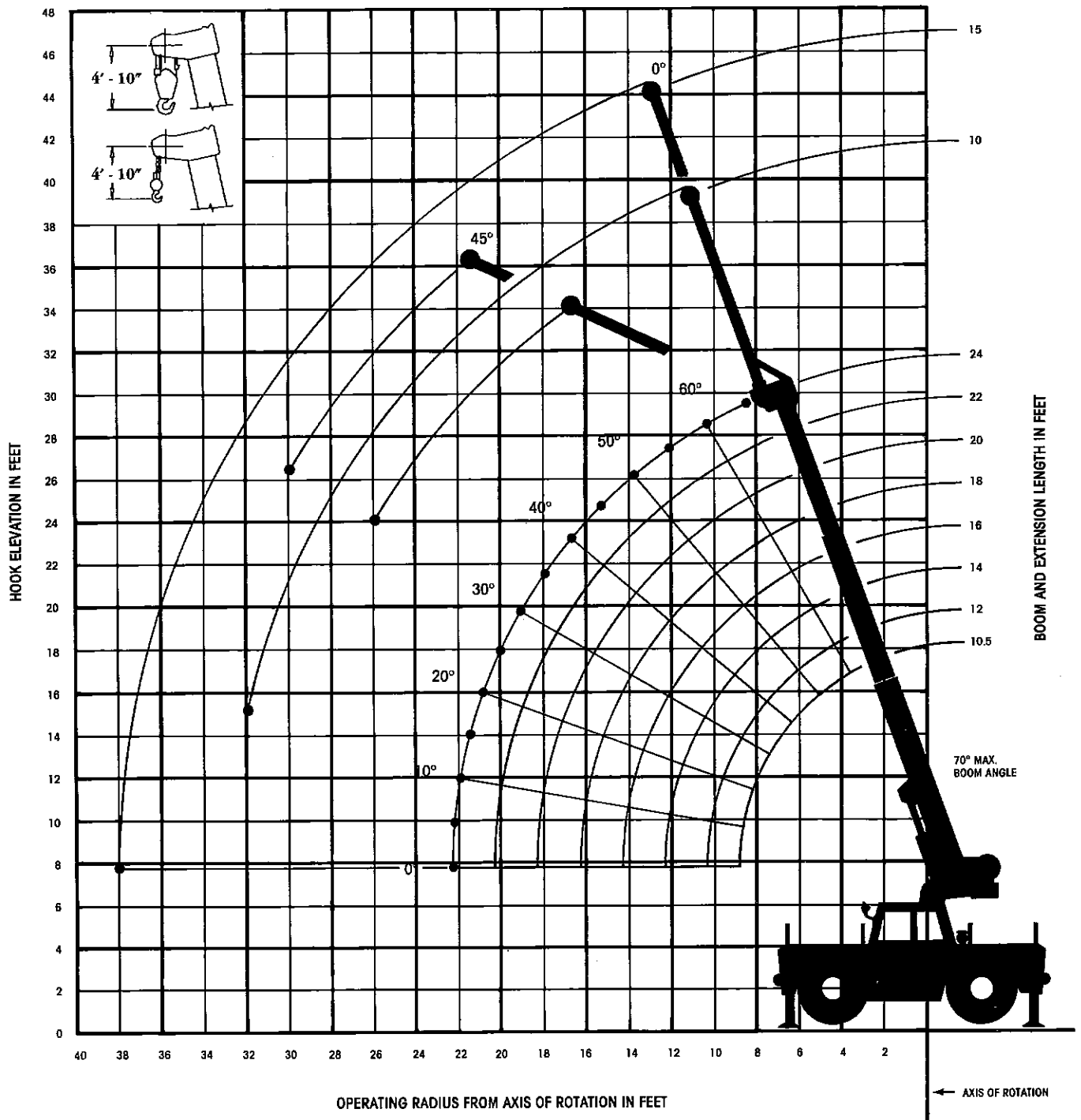


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Material Handling Hydraulic Crane/85% Domestic

RANGE DIAGRAM (UNLADEN BOOM)



10.5 FT. - 24 FT. FULL POWER MAIN BOOM

ON RUBBER

Radius in Feet	Stationary Capacity Defined Arc (3) Over Front	Stationary Capacity 360 Degree Arc	Pick & Carry Cap. Up to 2.5 MPH Boom Centered (6) 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	4,460	2,500	4,480
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

A6-829-007981A

ON OUTRIGGERS FULLY EXTENDED

Radius in Feet	Over Front	360 Degrees
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	6,740
18	5,900	4,750
20	5,150	4,040
22	4,590	3,500

A6-829-007960A

10 FT. FIXED AND 10 FT.-15 FT. TELE BOOM EXTENSION ON OUTRIGGERS

OVER FRONT

Radius in Feet	*10 ft. Tele Ext.		15 ft. Tele Ext.	
	0° Offset	45° Offset	0° Offset	45° Offset
8	7,000			
10	6,500		4,150	
12	6,000		3,800	
14	5,500	4,500	3,400	
16	5,000	4,200	3,150	
18	4,500	3,900	2,950	2,600
20	4,200	3,600	2,800	2,550
22	3,700	3,350	2,650	2,500
24	3,500	3,150	2,550	2,450
26	3,250	3,000	2,500	2,400
28	3,000		2,450	2,250
30	2,760		2,350	2,100
32	2,480		2,200	
34			2,000	
36			1,900	
38			1,800	

A6-829-009911

360°

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

A6-829-009831

10 FT. FIXED AND 10 FT.-15 FT. TELE BOOM EXTENSION ON RUBBER

OVER FRONT

Radius in Feet	*10 ft. Tele Ext.		15 ft. Tele Ext.	
	0° Offset	45° Offset	0° Offset	45° Offset
8	7,000			
10	6,500		4,150	
12	6,000		3,800	
14	4,570	4,500	3,400	
16	3,630	3,630	3,150	
18	2,970	2,970	2,950	2,600
20	2,480	2,480	2,550	2,550
22	2,100	2,100	2,180	2,180
24	1,800	1,800	1,890	1,890
26	1,560	1,560	1,650	1,650
28	1,360		1,450	1,450
30	1,180		1,280	1,280
32	1,040		1,140	1,140
34			1,020	
36			910	
38			810	

A6-829-009917

360°

Radius in Feet	*10 ft. Tele Ext.		15 ft. Tele Ext.	
	0° Offset	45° Offset	0° Offset	45° Offset
8	6,110			
10	4,260		4,150	
12	3,190		3,430	
14	2,490	2,490	2,700	
16	2,010	2,010	2,180	
18	1,640	1,640	1,790	1,790
20	1,360	1,360	1,500	1,500
22	1,140	1,140	1,260	1,260
24	960	960	1,070	1,070
26	810	810	910	910
28	690		780	780
30	580		660	660
32	480		560	560
34			480	
36			400	
38			330	

A6-829-009832

NOTES FOR LIFTING CAPACITIES

"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."

- All rated loads have been tested to and meet minimum requirements of SAE J1063 OCT80 - Cantilevered Boom Crane Structures - Method of Test, and do not exceed 85% of the tipping load on outriggers (75% of tipping load on rubber) as determined by SAE J765 OCT80 Crane Stability Test Code.
- Capacities given do not include the weight of hookblocks, 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.
- Defined Arc $\pm 6^\circ$ on either side of longitudinal centerline of machine.
- Capacities appearing above the bold line are based on structural strength and tipping should not be relied upon as a capacity limitation.
- 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.
- 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 MPH capacities are permissible on main boom only, **NOT** on boom extension.
*Creep not over 200 ft. of movement in any 30 min. period and not exceeding 1 mph.
- 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.
- For outrigger operation, ALL outriggers shall be fully extended with tires raised free of ground before raising the boom or lifting loads.
- Tires shall be inflated to the recommended pressure before lifting on rubber.
- When lifting loads with the tele-boom extension, the minimum allowable boom angle is: 3° with 0° offset and 48° with 45° offset.

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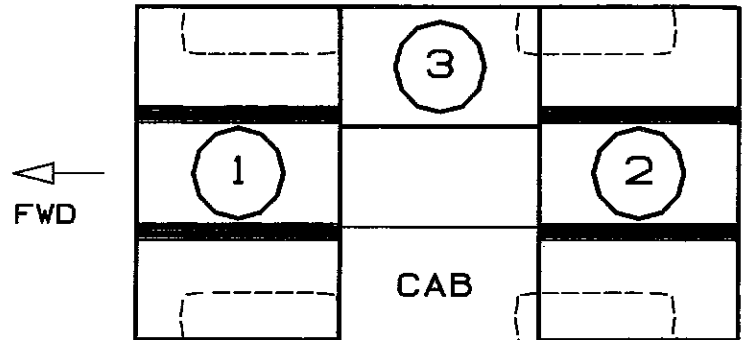
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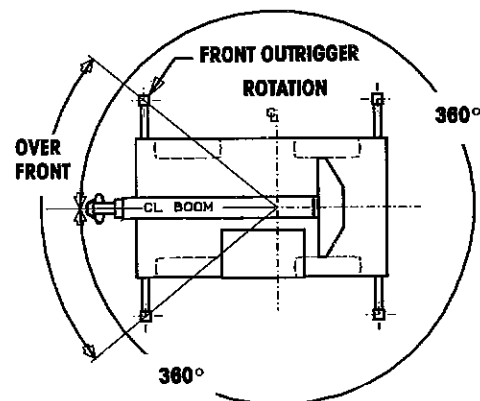
LOAD DISTRIBUTION CHART FOR CARRY DECK



MAXIMUM ALLOWABLE LOAD

AREA 1	26.5 SQ. FT.	6,625 LBS.
AREA 2	26.0 SQ. FT.	6,475 LBS.
AREA 3	8.5 SQ. FT.	2,125 LBS.

TOTAL 61 SQ. FT. 15,225 LBS.



LIFTING ON OUTRIGGERS

WEIGHT REDUCTIONS FOR LOAD HANDLING DEVICES

10 FT. FIXED LG. EXTENSION	
†Stowed -	65 lbs.
†Erected -	775 lbs.
10-15 FT. TELE. BOOM EXTENSION w/10.5-24 FT. BOOM	
†Stowed -	80 lbs.
†Erected (retracted) -	1,125 lbs.
†Erected (extended) -	1,380 lbs.

†Reduction of main boom capacities.

HOOKBLOCKS:	
8.5 Ton, 1 Sheave	304 lbs.
8.5 Ton, 2 Sheave	314 lbs.
5.0 Ton Headache Ball	172 lbs.
Searcher Hook	55 lbs.

NO LOAD STABILITY ON OUTRIGGERS AND RUBBER

No Load Stability Data		Main Boom 24 ft. & Extensions
Front	Min. boom angle (deg.) for indicated length	0
(No load)	Max. boom length (ft.) at 0 deg. boom angle	24
380 Deg.	Min. boom angle (deg.) for indicated length	0
(No load)	Max. boom length (ft.) at 0 deg. boom angle	24

Superstructure specifications

Boom	10.5 ft. to 24 ft. (3.2m - 7.3m) three section Trapezoidal full power boom. Telescoping is mechanically synchronized with single lever control. Telescopic sections slide on adjustable and replaceable Nylatron wear pads. Maximum Tip Height: 29 ft. (8.8m).
Swingaway Extension	10 ft. (3.05m) swingaway boom extension with offset links, stows alongside base boom section when not in use. Offsettable at 0° or 45°. Maximum Tip Height: 39 ft. (11.9m).
Optional Telescopic Swingaway	10 ft. to 15.7 ft. (3.05m to 4.8m) telescopic swingaway extension with offset links, offsettable at 0° or 45°. Stows alongside base boom section when not in use. Maximum Tip Height: 44 ft. (13.4m).
Boom Nose	Two lower steel sheaves and one idler sheave mounted on bronze bushing with removable pin-type rope guards.
Optional Searcher Hook	3,000 lbs. (1316 kg) capacity, boom nose mounted.
Boom Elevation	Single double acting hydraulic cylinders 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, load indication and warning of impending two-block conditions.
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. Also available with enclosed cab: *sound suppression kit, *hot water heater and forced air defroster.
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	Integral with superstructure. 2,100 lbs. (952kg).

HYDRAULIC SYSTEM

Pumps	2 main gear pumps, combined capacity 54.4 G.P.M. (205.7 LPM) driven by carrier engine through P.T.O.
Valves	Precision four way double acting control valves, 2 individual valve banks permit simultaneous control of two crane functions.
Filter	Return line type, full flow with bypass protection and service indicator. Three micron rated replaceable cartridge.
Reservoir	30 gallons (114 L) with spin-on breather filter, external sight gauges, clean out access, strap mounted to frame.
Oil Cooler	Remote mounted with thermostatically controlled electric motor driven fan.
Pressure Check Panel	System pressure check panel permits easy verification of circuit pressures.

HOIST SPECIFICATIONS

Power up and down equal speed, planetary reduction with automatic spring applied multi-disc brake and hoist drum cable follower.

	Main Hoist Grove HO12	
Maximum single line speed	Bottom layer	120 FPM (37m/min)
	Intermediate layer	132 FPM (40m/min)
	Top layer	145 FPM (44m/min)
Maximum single line pull	Bottom layer	9,580 lbs. (4345kg)
	Intermediate layer	8,692 lbs. (3943 kg)
	Top layer	7,954 lbs. (3608 kg)
Maximum permissible single line pull	7,400 lbs. (3356 kg)	
5:1 strength factor	with 9/16 in. (14mm) 18x19 class	
Maximum rope stowage	181 ft. (55.2m) 9/16 in (14mm)	
	Note: 130 ft. (39.6m) length of wire rope supplied with basic standard unit.	

*Denotes optional equipment

Carrier specifications

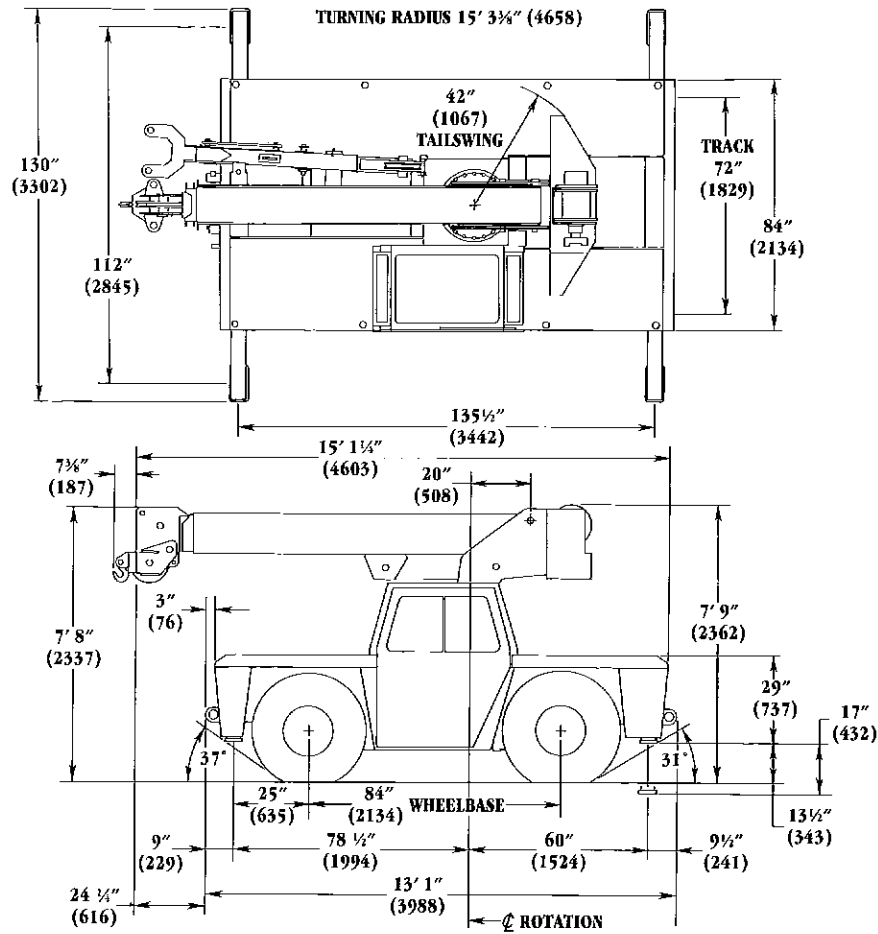
Frame	High strength alloy steel construction with integral outrigger housings and front/rear lifting, towing and tie down lugs. Carry deck with surface area of 62 sq. ft. (5.8m ²).
Outrigger System	Front and rear oblique type telescoping beams at all four corners with integral holding valves. Outrigger pads are an integral part of the beam and have a surface area of 72 sq. in. (464 cm ²). Maximum outrigger pad load 15,000 lbs. (6804 kg).
Outrigger Controls	Located in cab on left side of seat and on right side of dash requires two hand operation. Crane level indicator located in cab.
Engine	Cummins 4B3.9L four cylinder water cooled diesel - 3.9 liters, 76 bhp (57 kw) (Gross) @ 2,500 RPM. Maximum torque 184 ft. lbs. (23 kg/m) @ 1,200 RPM.
Optional	Continental TM2.7L four cylinder water cooled gas - 2.7 liters, 66 bhp (49 kw) (Gross) @ 2,800 RPM. Maximum torque 144 ft. lbs. (19 kg/m) @ 1,800 RPM.
Fuel Tank Capacity	30 gallons (114 L)
Electrical System	One 12 volt maintenance free battery, 815 CCA @ 0° F. 12 volt starting.
Drive	4 x 2
Steering	Rear: Full hydraulic power controlled by steering wheel.
Transmission	4 forward and 4 reverse speeds with torque converter drive and forward/reverse shuttle control.*Optional automatic transmission with 3 forward and 1 reverse speeds.
Axles	Front: Drive-type with no-spin differential and planetary reduction hubs (rigid mounted to the chassis). Rear: Steer-type mounted rigid to the frame
Tires	Standard 10.00 x 15-16PR tube type, deep mine lug.
Brakes	Hydraulic drum and shoe type acting on front drive wheels. Mechanical hand lever actuated parking brake. *Optional are hydraulic brakes acting on all four wheels.
Lights	Full lighting package including turn indicators, head, tail, brake and hazard warning lights.

Maximum Speed	29 MPH (46.7 kph). *17 MPH (27 kph) with optional automatic transmission.
Maximum Gradeability	65.6% (Theoretical based on 15,461 lb. [7013 kg] GVW).
Gross Vehicle Weight & Axle Loads	BASIC STANDARD MACHINE (3 Section Boom) Front: 6,731 lbs. (3053 kgs) Rear: 8,730 lbs. (3960 kgs) G.V.W.: 15,461 lbs. (7013 kgs)
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

*Denotes optional equipment.

Dimensions

AP308



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