

Rough Terrain Crane

35 Ton Maximum Capacity

130 Feet (39.6 m) Maximum Tip Height



- **A duty-cycle machine** - powerful two-speed P&H winches offer high line speeds and pull. Four pump hydraulic system has optimum flow for fast crane functioning. *No derating of capacities on powered boom or 25 foot lattice extension for bucket work.*
- **Telescope rated loads** for precise placement. Semi-fixed cylinder mounts decrease cylinder deflection under load and increase telescoping capacity.
- **Superior lifting performance** provided by rectangular full depth four plate boom that is welded inside and out.
- **Extraordinary maneuverability** - four wheel drive/steer with coordinated steering has short turning radius and low travel height.
- **Turbocharged engine** offers low sound levels, low fuel consumption, excellent high altitude performance and superior torque for optimum horsepower usage.
- **Total operator comfort** means less fatigue and greater production. Spacious cab module allows placement of controls "in the palm of your hand", lots of leg and elbow room, and full vision of all activities.
- **Less downtime** - "Pit-Stop" maintenance-proven. Famous for serviceability - engineered for parts commonality, accessibility and fast tear-down.

Specifications

Specifications

ITEM NO.

This P&H crane meets the requirements of ANSI B30.15-1987. Boom Structure (boom, lattice extension and jib) has been tested per SAE J1063, machine stability tested per SAE J765. LOAD RATINGS shown apply only to machine as manufactured by Century II, inc.

BASIC MACHINE

Boom



Boom: All boom sections are of full depth rectangular four plate construction, welded inside and out, with adjustable slider pads on top, bottom and sides. All powered sections are single lever controlled. Block type semi-fixed telescope cylinder mounts provide ample capacity to telescope rated loads.

Boom point contains one idler sheave and five load sheaves. Sheaves are 15" (381mm) pitch diameter and are non-metallic with roller bearings.

Standard Boom: 80' (24.4M) three (3) section powered boom, 32' (9.8M) retracted length, 80' (24.4M) extended length, consisting of one base section and two powered sections.

For performance characteristics, see Chart No. 1: Range Diagram and Chart No. 2: Lifting Capacities.

(For enhanced performance, see Boom Options and Accessories).

Counterweight: 7082lbs. (3212 kg) with main winch only; 6115 lbs. (2774kg) with both main and auxiliary winches.

Upperstructure



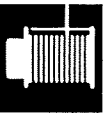
Operator's Cab: All-weather environmental cab of steel has hinged tinted ceiling window, slide-by right side window, locking slide-by door and large windows with a full view in all directions. Safety glass used throughout. Operator's four-way adjustable seat has torsion suspension and seat belt. Cab is 34.5" (876mm) wide with a stand-up height of 56" (1422mm) and is cushion mounted for vibration dampening and noise reduction.

Cab Equipment (Standard): Cab contains all roading and crane function controls. Also includes winch high speed indicators, electric anti-two-block warning indicator, windshield wiper, fire extinguisher, electric horn, tachometer, speedometer, rearview mirror and dash light.



Controls: In front of operator are foot pedals for boom hoist, swing brake, service brakes, and engine throttle. Far left of steering wheel are console mounted double-acting levers for swing and telescope. At the right are levers for auxiliary winch (optional), main winch and boom hoist. Drum rotation indicator is mounted on main winch lever and a directional indicator (emergency flasher) switch on steering column. On right side of seat are floor mounted levers for house lock and swing holding brake. Also at operator's right are console mounted switches for master ignition, steering mode, parking brake, windshield wiper, master lights, high-low transmission range and outrigger controls. Also on console are engine start button, warning light and buzzer monitoring power plant gauge panel, engine stop button, dash light, cigaret lighter, fuel gauge, air pressure gauge, circular level, gear selector lever, forward-reverse selector lever and positive (air) hand throttle. Console has prewired removable modules for ease of service.

Other Controls: Located elsewhere - Power plant gauge panel (rear of engine compartment) with gauges for hydraulic oil temperature, engine oil pressure, engine water temperature, torque converter oil temperature, transmission clutch oil pressure, volt meter and hour meter, hydraulic axle oscillation lockouts on rear axle cradle, pump disconnect lever on pump drive housing. Front axle disconnect is automatic when transmission is shifted into high range.



Main Winch: P&H model 1580 two speed, mounted on rear of upper frame. Planetary gearing with equal speed power raising and lowering. Infinitely variable controlled speed. Spring applied, hydraulically released load holding multiple disc brake is automatic. Complete with 450' (137M) wire rope.

Drum: 14.875" (378mm) P.D. X 18.5" (470mm) wide with 22.25" (565mm) dia. flanges.

Wire Rope (Standard): 5/8" (16mm) dia. 6x25 extra improved plow steel, with 7x7 I.W.R.C.

(See options, page 4, for spin resistant rope).

See Chart No. 5, Hoist Reeving, for rope capacities and parts of line required.

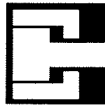
Drum Capacity: 639 ft. (195M) 5 layers.

Line Pull (Max.): 14,875 lbs. (6,741kg) 1st layer.

Line Pull (Permissible - based on strength of wire rope): 8,600 lbs. (3,924kg) per part of line.

Line speed Up (max.): 487 fpm (148M/m) 5th layer (high speed).

(See options for Auxiliary Winch)



Boom Hoist: One 9" (229mm) I.D. cylinder, double-acting. Hydraulically powered raising and lowering with holding valve.

Boom Telescope: Two 5.75" (146mm) I.D. - double-acting cylinder for powered section. Hydraulically powered extending and retracting with holding valve. Supplied by a single hose loop.

Hydraulic System: This system utilizes 4 pumps and is designed to provide ample volume and pressure for optimum performance. The pumps are gear driven from two PTOs located on rear of engine torque converter.

The left hand main tandem gear pump, at 2500 rpm (engine full load), provides 27.5 gpm (104 lpm) to the main and/or auxiliary winch boost and steering circuits and 24 gpm (91 lpm) to the swing or outrigger circuits.

The right hand tandem gear pump, at 2175 rpm (corresponding to full load) provides 53 gpm (200 lpm) to the main and/or auxiliary winch circuits and 37.5 (142 lpm) to the boom hoist and telescope circuits. This pump is furnished with a manual disconnect. Linkage extends through engine housing for easy accessibility.

Total flow for this system at governed engine speed is 142 gpm (537 lpm). High pressure oil leaving the pump to the swing, steer and outrigger circuits is filtered to 20 microns to protect seals in cylinders, valves and motors, before entering the functioning circuits. All returning oil is filtered in a bypass type filter to 10 microns before entering the reservoir.

The 124 gal. (469 liter) reservoir is located on the right side of the carrier. Pumps, valves, cylinders and motors are readily accessible and easy to service. Control valves are four way, three position type with low effort spools and pilot-operated relief valves for quick, smooth response. A single spool pressure compensated valve is used for swing metering control. Cable linkage connects valves to control levers. Air to oil cooler is standard.



Swing Unit: Hydraulic motor driving through 36:1 planetary gear reducer to pinion gear, 360° continuous rotation to 3.13 rpm.

Swing Gear: External cut spur gear with 136 teeth 45.3" (1151mm) P.D. Ring gear dust cover is available (optional).

Swing Brake: Multiple disc brake integral with swing reducer, manually engaged with swing brake lever and hydraulically released by swing lever engagement.

House Lock: Two position (front and rear) pin-in-hole lock manually engaged with house lock lever.

Rotary Manifold: Sealed rotary swivel for air and hydraulic hose connections between rotating upper and carrier. Quickly removable from above or below for servicing. Electrical swivel is mounted on top of air and hydraulic swivel.

Fastening to Lower: Single row ball bearing integral with swing gear. Welded to carrier frame and bolted to rotating frame. Bearing is protected from dust by labyrinth seal.



Carrier

Carrier: 4x4x4 (Four wheels drive. Four wheels steer) - for rough terrain with limited turning area.

Frame: All welded unitized construction assures rigidity and permanent alignment of swing bearing and rotating upper machinery. Fabricated of rectangular structural tubing main frame beams of high strength 46,000 psi (3220kg/sq. cm) minimum yield steel and reinforced with rectangular box cross members of high strength 50,000 psi (3500 kg/ sq. cm) minimum yield steel. Lifting lugs front and rear.



Hydraulic Outriggers: Four (4) independent assemblies that hydraulically extend out horizontally from carrier frame and down vertically to form a stable working platform. Four (4) double-acting hydraulic cylinders provide independent horizontal beam movement and four (4) provide vertical rod movement. Vertical cylinders are equipped with holding valves. Cylinders are actuated by electric solenoid directional control valves operated from cab console switches.

Outrigger Beams: Fabricated high strength alloy steel box extending to a maximum 8' 11" (2.7 m) from centerline of carrier.

Outrigger Floats: Removable floats with storage on outrigger box. Float size 19.25" (489 mm) square.



Steering Options: (A) Front axle steer - hydrostatic power system fully controlled by steering wheel; (B) Front and rear axle steer - hydrostatic power system fully controlled by steering wheel for front and rear axles. Two wheel, four wheel and crab steer mode selection is controlled by three-position toggle switch located in cab on side console. Center position of switch locks position of rear wheels and only front wheels are steerable. The amount of rear wheel turn is controlled by steering wheel.

Front axle: Rockwell PSM 824 steer and drive axle driven through differential with planetary in hubs. Total reduction 16.65:1. Axle is rigid mounted and has power steering. Front axle is disconnected automatically for highway travel when transmission is in high range.

Rear Axle: Rockwell PSM 824 steer and drive axle driven through differential with planetary in hubs. Power steering, with optional no-spin differential. Axle is pivot mounted with automatic hydraulic lockout cylinders to prevent oscillation (vertical movement of axle). Total oscillation attainable is 8" (20.3cm).

Service Brakes: Air over hydraulic brakes on all four wheels. Dual shoe type brakes. Drum dia. 17.25" (438 mm). Shoe width 4" (102 mm).

Parking Brake: Spring-set air chamber on 12.5" dia. (318 mm) transmission output shaft disc brake. Spring applied and air released for safety.

Tires: Standard - 16:00X25-24 ply tubeless earthmover Sure Grip (E-3).

See Chart No. 6 for "On Rubber" lifting capacities. Alternate tires and spares available. See Options.

Miscellaneous Equipment (Standard): Sliding engine hood, tow lugs, hydraulic pump disconnect, automatic moisture ejector for air system, oil to air transmission cooler, front axle disconnect and oil to air hydraulic oil cooler. Additional accessories listed under Options.



Power Plant:

Make Detroit Diesel
 Model 4-53T
 Type Diesel
 Cylinders 4
 BoreXStroke 3.875"x4.50"
 99x114mm
 Displacement 212 cu.in.
 3.5 liters
 Cycles Two
 Air Induction Turbocharged
 Starting 12 volt motor
 Negative Ground
 Charging 12 volt alternator, 42 amp.
 Compressor Air 12 CFM @ 1250 rpm
 Governor Air 105-120 psi
 Fan 6 blade, suction type
 22 in. (559mm)

Ratings:
 Gross HP @ rpm 155 @ 2650
 Kilowatts @ rpm 116 @ 2650

Accessories:

Cooling Liquid recirculating, bypass, pressurized.
 Radiator Tube and fin type, thermostat controlled.
 Battery 210 amp. hour, Voltmaster Type H8D
 Fuel Tank 50 gal. (189.3 liters) Meets FHWA requirements, (Left side of carrier).
 Air Cleaner Two stage dry type - replaceable element.
 Lube oil filter Replaceable element. Full-flow.
 Fuel Filter Replaceable element. Full flow.



Transmission: Powershift with 12.75" (324 mm) torque converter, 6 speeds equal forward and reverse, with high-low electric controlled air range shift. Electrically controlled, pneumatically operated gear shift. Neutral safety start.



Performance: Standard Powershift Transmission - 6 forward, 6 reverse speeds. Performance in highest and lowest gear based on engine at full load rpm, 53,000 lb. (24,041 kg) gross vehicle weight, 16:00X25 tires and good surface road.

Low Range Speeds

1st 2.0 mph (3.2 kmph)
 2nd 4.4 mph (7.08 kmph)
 3rd 12.5 mph (20.1 kmph)

High Range Speeds

1st 5.5 mph (8.8 kmph)
 2nd 10.4 mph (16.7 kmph)
 3rd 26.0 mph (41.9 kmph)

Capacities of Reservoirs and Systems:

	Quarts	Liters
Engine w/Filter	13	12.3
Cooling System - Engine and Radiator	32	30.3
Transmission	24	22.7
Axle Differential - Front	21	19.9
Rear	21	19.9
Planetary Hubs (each)	6	5.7
Hydraulic Tank	496	469
Fuel Tank	200	189.3
Swing Transmission	4	3.8
Winches (planetaries)		
Main	2.8	2.7
Auxiliary	2.5	2.4
Swing Brake Master Cylinder	0.5	0.5
Service Brake Reservoirs	1.5	1.4

End Basic Machine

OPTIONS

Boom Options and Accessories

ITEM NO.

14 **Boom Extension:** 30 ft. (9.8 m) swing-around tapered lattice structure with a single 15" (381 mm) P.D. Metallic boom point sheave with roller bearing. Easily installed from ground level by pivoting from its stored position on right side of boom base and pin connecting to boom point. For extending reach of boom. Includes anti-two block material.

See Chart No. 3 for Lattice Extension ratings.

20 **Positive Swing Lock - 360 degrees:** (Req'd to meet NYC Codes)

21 **20 ft. Jib (A-Frame):** Includes anti-two block material. (Requires item no. 14)

See Chart No. 4 for Jib ratings.

27 **10 ton Hook Block:** One sheave.

28 **35 ton Hook Block:** Four sheaves.

29A **Auxiliary Winch:** Model P&H 1580, two speed. (Same as main winch).

cont. next page

ITEM
NO.

31 **Auxiliary Winch:** P&H model 1080 single speed mounted on counterweight. Planetary gearing with equal speed raising and lowering. Infinitely variable controlled speed. Spring applied, hydraulically released load holding multiple disc brake is automatic.

Drum: 11.25" (286 mm) P.D. x 16.5" 419 mm wide with 16.75" (425 mm) dia. flanges.
Wire Rope: 1/2" (12.5 mm) dia. 8x19 spin resistant, extra improved plow steel with 7 x 7 I.W.R.C.
Drum Capacity: 543 ft. (165 m) 5 layers.
Line Pull (max.): 10,500 lbs. (4761 kg) 1st layer.
Line Pull (permissible): 6,200 lbs. (2812 kg) per part of line.
Line Speed Up (max.): High Speed 360 fpm (110 m/m) 5th Layer.

32A **Auxiliary Winch Wire Rope:** 1/2" dia. x 360', for 1080 winch.

32B **Auxiliary Winch Wire Rope:** 5/8" dia x 450', for 1580 winch.

33 **8.5 ton Hook:** with swivel, for Jib.

35 **Dual Brakes**

36 **Mechanical Drum Turn Indicator:** for Auxiliary winch.

37 **Auxiliary Boom Point Sheave:** includes anti-two block material.

38 **Special Paint**

44 **Override for Automatic Rear Axle Oscillation Lockouts**

45 **No Spin Axle:** rear axle only.

46A **Windshield Washer**

47 **Roof Window Wiper**

48 **Heater and Defroster:** diesel.

49 **Heater And Defroster:** Propane w/o tank.

53 **Floodlights (3):** includes 65 amp alternater.

54A **Swing Gear Cover**

55 **Pintle Hook:** front or rear (each).

64 **Tires:** 20.5 x 25-20 PR tubeless Sure Grip lug wide base (E-2).

67 **Spare Tire and Wheel:** 16:00 x 25-24 PR.

67A **Spare Tire and Wheel:** 20.5 x 25-20 PR.

69A **Sheet Metal Installation With Tool Box**

71 **Cold Weather Starting Kit**

75 **Amber Rotating Beacon:** top of cab.

76 **Single Speed Winch:** frame mounted, 15,000 lb. line pull. (Less rope).

77 **Vandalism Kit:** Lexan glass.

77A **Tinted Glass**

78 **Plumbing and Controls for Auxiliary Winch:** no winch. For future installation.

80 **Air Dryer**

81 **Rear Steer Centering Light**

98 **Air Conditioner**

ITEM
NO.

Operational Aids

104 **P.A.T. Load Moment Operational Aid:** DS350 Microprocessor System Includes: Load Moment Device w/ Audio-Visual Warning, Rated Load, Actual Load, Tare, Radius, Angle, Length & Height of Boom Tip Indicators. Includes Control Lever Lockouts (Magnet Valve Shut-Off Devices).

106 **Krueger (HAP) Boom Angle Indicator:** W/ Audio-Visual Warning

107 **Krueger (HLAP) Boom Angle, Length, Radius Indicators:** w/ Angle preset and Audio-Visual Warning.

108 **P&H Control Lever Lockouts:** (Magnetic Valve Shut-Off Devices) for Anti-Two Block Device and Item 105 or 107.

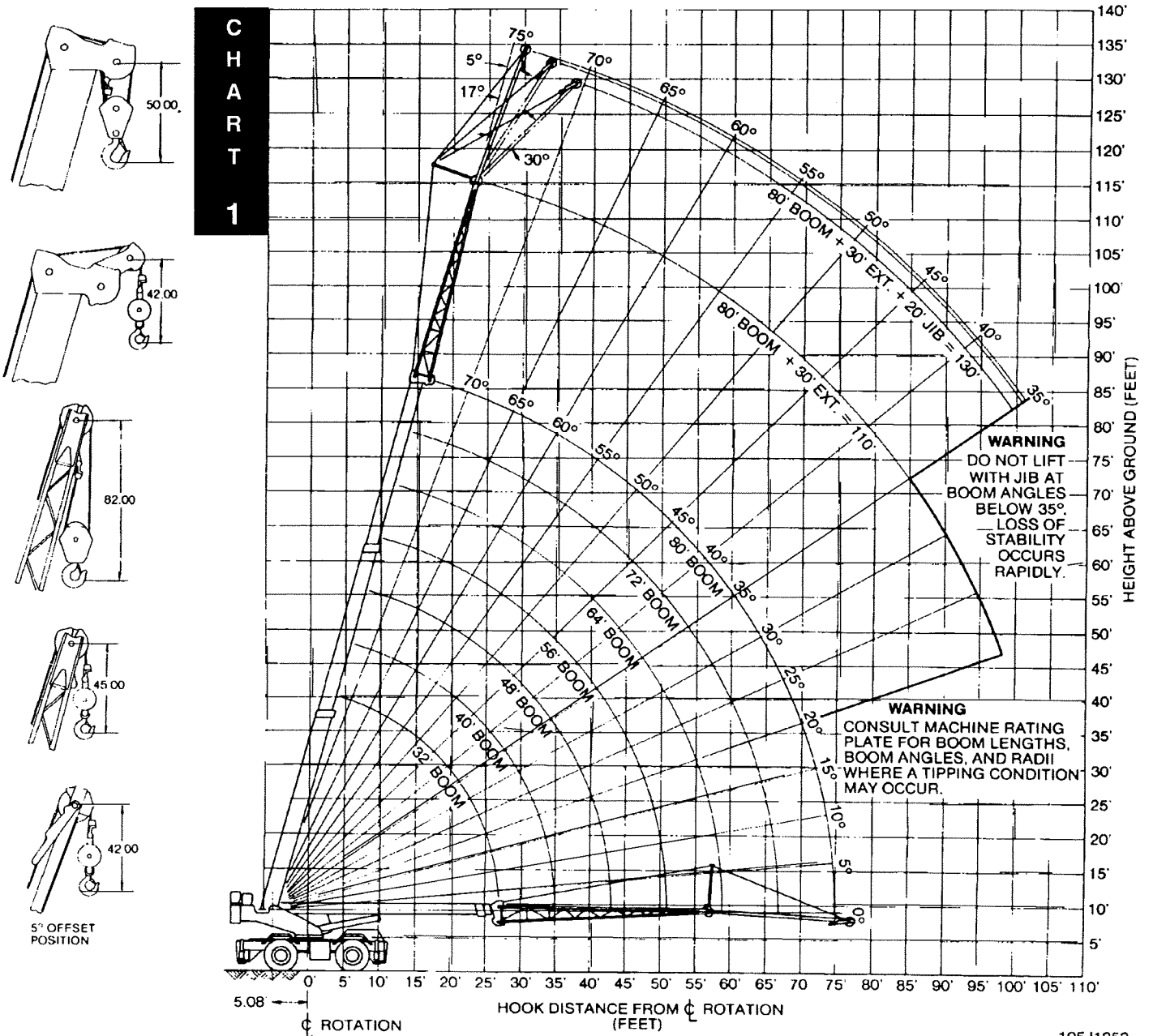
109 **Krueger Load Moment System (Mark IIIE):** Includes - Load Moment Device w/ Audio-Visual Warning, Radius, Angle, Length, w/ angle preset. Includes Control Lever Lockouts (Magnetic Valve Shut-Off Devices).

End of Optional Equipment

Vehicle Weights: Includes standard engine, standard boom (forward in travel position), standard main winch and cable, standard tires, 50 gals. (189 liters) fuel, 124 gals. (469 liters) hydraulic oil, oil cooler, fenders and counterweight.

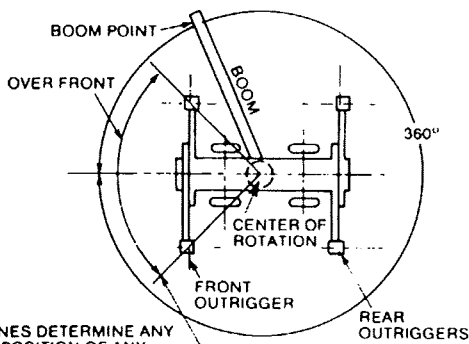
	G.V.W.	Front Axle	Rear Axle
	53,261 lb. (24,160 kg)	26,234 lb. (11,900 kg)	27,027 lb. (12,260 kg)
Effect on axle loads by adding these items:			
1580 Auxiliary winch with cable, cwt.	+98 lb. (44 kg)	-30lb. (14 kg)	+128 lb. (59 kg)
1080 Auxiliary winch with cable, cwt.	+113 lb. (52 kg)	-10 lb. (4 kg)	+123 lb. (56 kg)
20.5x25-20 ply tires	+304 lb. (138 kg)	+152 lb. (69 kg)	+152 lb. (69 kg)
Boom Extension (stored)	+898 lb. (407 kg)	+1458 lb. (661 kg)	-560 lb. (254 kg)
Auxiliary Sheave (with mounting)	+84 lb. (38 kg)	+260 lb. (118 kg)	-176 lb. (80 kg)
8.5 ton weighted hook	+220 lb. (100 kg)	+668 lb. (303 kg)	-448 lb. (203 kg)
10 ton hook block	+342 lb. (155 kg.)	+1039 lb. (471 kg)	-697 lb. (316 kg)
35 ton hook block	+425 lb. (193 kg)	+1291 lb. (586 kg)	-866 lb. (393 kg)
Propane heater w/ tank	+68 lb. (31 kg)	-1 lb. 0	+69 lb. (31 kg)
Diesel heater	+43 lb. (19 kg)	0	+43 lb. (19 kg)

working ranges



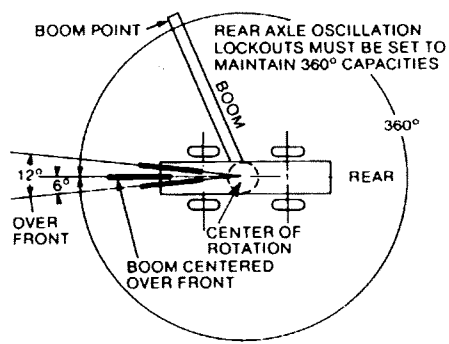
areas of operation

ON OUTRIGGERS



THESE LINES DETERMINE ANY LIMITING POSITION OF ANY LOAD FOR OPERATION WITHIN WORKING AREAS INDICATED

ON RUBBER



Three Section Full Powered Boom on Outriggers Rated Crane Loads in Pounds Boom in 360° and Over Front Work Areas

CHART 2

OPERATING HEIGHT		BOOM LENGTH IN FEET																		OPERATING HEIGHT		
		32 FT.		40 FT.		48 FT.		56 FT.		64 FT.		72 FT.		80 FT.								
		RATED LOAD IN POUNDS		RATED LOAD IN POUNDS		RATED LOAD IN POUNDS		RATED LOAD IN POUNDS		RATED LOAD IN POUNDS		RATED LOAD IN POUNDS		RATED LOAD IN POUNDS								
△		360°	FRONT	△		360°	FRONT	△		360°	FRONT	△		360°	FRONT	△		360°	FRONT			
10	66	70000	70000	71	60000	60000														10		
12	61	50000	50000	68	50000	50000	72	50000	50000	75	46000	46000								12		
15	55	43000	43000	63	43000	43000	68	43000	43000	72	43000	43000	74	35500	35500					15		
20	42	30000	30000	54	30000	30000	61	30000	30000	66	30000	30000	70	30000	30000	72	27000	27000	75	25000	25000	20
25	24	22800	22800	44	22800	22800	54	22800	22800	60	22800	22800	65	22800	22800	68	22800	22800	71	21000	21000	25
30				32	17200	18000	44	17200	18000	54	17200	18000	59	17200	18000	64	17200	17500	67	17200	17200	30
35							36	13100	14400	47	13100	14400	54	13100	14400	59	13100	14400	63	13100	14400	35
40							23	10000	11250	39	10000	11250	48	10000	11250	54	10000	11250	58	10000	11250	40
45										29	8200	8800	41	8200	8800	48	8200	8800	54	8200	8800	45
50										13	6550	7300	33	6550	7300	42	6550	7300	49	6550	7300	50
55													22	5300	6050	36	5300	6050	44	5300	6050	55
60																28	4400	5000	38	4400	5000	60
65																			31	3700	4200	65
70																			22	3050	3250	70
75																			11	2500	2850	75

CAUTION: FOR 32 FOOT BOOM LENGTH RATINGS, TELESCOPE CYLINDERS MUST BE FULLY RETRACTED AND AGAINST STOPS.

WARNING: Do not exceed rated load radius for a rated load.

Warning: Main boom ratings must be reduced by weight of fixed boom attachments. See Chart no. 8.

Ratings above heavy line are based on structural competence and not the machine stability.

CHART 3

LATTICE EXTENSION				OPERATING HEIGHT
110 FT.				
LOADED BOOM ANGLE	RATED LOAD IN POUNDS			
△	360°	FRONT		
73	12000	12000	30	
71	10700	10700	35	
68	9800	9800	40	
65	8100	8100	45	
62	7300	7300	50	
59	6400	7100	55	
56	5200	6050	60	
52	4500	5600	65	
49	3700	4250	70	
46	3100	3700	75	
41	2500	3100	80	
37	2050	2600	85	
32	1700	2200	90	
26	1400	1800	95	
19	1150	1400	100	

WARNING

For boom lengths less than 110 feet with boom extension erected, the rated loads are determined by boom angle only in the column headed by 110 foot boom. For boom angles not shown, use rating of next lower boom angle.

CHART 4

JIB RATINGS			
MAX. LOAD RATINGS IN POUNDS			
MIN. BOOM ANGLE	JIB ANGLE OFFSET		
	5°	17°	30°
75°	6200	6000	5100
70°	6000	5000	4500
65°	5000	4500	4000
60°	3800	3500	3500
55°	3100	3000	3000
50°	2400	2300	2300
45°	1900	1800	1800
40°	1400	1300	1300
35°	1000	1000	1000

Jib Capacity Notes

- Maximum jib load ratings are based on structural competence and do not exceed 85% of tipping load with fully extended outriggers. Use of outriggers is required when boom is equipped with a jib.
- For bucket ratings on jib, deduct 20% from maximum jib load ratings.
- Warning:** Do not lift with jib at boom angles below 35°. Loss of stability occurs rapidly.
- Warning:** Do not exceed 101 foot operating radius with erected jib or a tipping condition will occur.

CHART 5

MAIN HOIST REEVING								
5/8" DIA. 6 X 37 WIRE ROPE - EXTRA IMPROVED PLOW STEEL W/I.W.R.C. - BREAKING STRENGTH: 41,200 lbs.								
PARTS OF LINE	1	2	3	4	5	6	7	8
MAXIMUM LOAD	8750	17,500	26,250	35,000	43,750	52,500	61,250	70,000

AUXILIARY HOIST REEVING								
1/2" DIA. WIRE ROPE - 6 X 37 EXTRA IMPROVED PLOW STEEL W/I.W.R.C. BREAKING STRENGTH: 26,600 lbs.								
PARTS OF LINE	1	2	3	4	5	6	7	8
MAXIMUM LOAD	6,200	12,400	18,600	24,800	31,000	37,200	43,400	49,600

On Rubber

Rated crane loads in pounds - minimum boom (72' maximum)

CHART
6

RATED LOADS FOR 16:00 X 25 - 24 PLY TIRES					LOAD RADIUS (FEET)	RATED LOADS FOR 20.5 X 25 - 20 PLY TIRES				
STATIONARY			CREEP	2 1/2 MPH		STATIONARY			CREEP	2 1/2 MPH
BOOM CENTERED OVER FRONT	±6° ARC OVER FRONT	360° ARC	BOOM CENTERED OVER FRONT			BOOM CENTERED OVER FRONT	±6° ARC OVER FRONT	360° ARC	BOOM CENTERED OVER FRONT	
44400	40400	24200	34700	28100	10	40000	36700	22300	31100	21700
38200	34500	18000	29700	23900	12	34400	31300	17400	26500	18300
30200	28000	12200	24100	19200	15	24700	24700	12200	21500	14500
16800	16800	7300	16800	14100	20	16100	16100	7300	15800	10300
11200	11200	4600	11200	10700	25	11500	11500	5000	11500	7600
8200	8200	3000	8200	8200	30	8300	8300	3200	8300	5700
6100	6100	2100	6100	6100	35	6000	6000	2100	6000	4400
4400	4400	1200	4400	4400	40	4500	4500	1400	4500	3200
3400	3400	-	3400	3400	45	3500	3500	-	3500	-
2500	2500	-	-	-	50	2500	2500	-	-	-
1800	1800	-	-	-	55	1800	1800	-	-	-

WARNING: Do not exceed maximum with or without hook block, condition will occur.

shown for each column, condition will occur.

Definitions:

- Creep is motion for less than 200 ft. in a 30 minute period and not exceeding 1 mph.
- Stability ratings do not exceed 75% of tipping loads.

Information:

- Ratings above heavy line are based on structural competence and not on machine stability.
- It is recommended that outriggers be extended as far as possible and clear of ground when lifting on rubber.

Warning: Crane load ratings without outriggers depend on tire capacity and condition of tires, inflated per table.

Warnings:

- When transporting a load, machine must be on firm, level surface with mechanical houselock engaged. The load must be centered over front of machine and restrained from swinging.
- When swinging 360° load ratings, optional axle lockout override function must not be engaged.
- On rubber lifting with boom extension or jib is not permitted.
- Lift loads with minimum boom lengths, not to exceed 72 ft. when lifting on rubber.

\$\$\$

CHART
7

Tire Inflation			
	Static and Creep	2 1/2 mph	Travel
16:00 x 25 - 24 ply tires	100 psi	95 psi	75 psi
20.5 x 25 - 20 ply tires	80 psi	65 psi	50 psi

dzwigi24.pl

Operating Instructions

Warning: Operation of this machine in excess of rated loads, in areas of the chart not rated, or with disregard of instructions voids the machine warranty.

- Load radius** is the horizontal distance from the axis of rotation (before loading) to center of verticle hoist line (after loading). Actual working radii should be an accurate measurement.
- Boom, lattice extension and jib point height dimensions are measured from ground to center of load sheave.
- Loaded boom angle** is the angle between the boom base section and the horizontal axis after lifting rated load at rated radius. loaded boom angles shown are with rated loads applied and provide an **approximation** of the **load radius** at the specified **boom length** (includes lattice extension). The boom angle before loading should be slightly greater to account for boom deflection.
- Load ratings shown are for machine with counterweight as shown, leveled and standing on firm, uniform supporting surface. Ratings are based on freely suspended loads and, on outriggers, are not more than 85% of minimum tipping loads. Ratings above the bold horizontal line are based on machine's hydraulic or structural competence and not on machine stability (tipping conditions).
- To determine **load ratings** in-between those shown on the chart, proceed as follows:
 - for boom lengths not shown, use rating of next longer boom.
 - for load radii not shown, use rating of next longer radius.
- Deduct weight from **load ratings** of all suspended load handling devices such as hooks, hook blocks, slings, buckets, etc., as they are considered part of the load. See Chart No. 8 for deductions.

- Deduct weight from **Load Ratings** of fixed boom attachments (jib, boom extension) either stowed or erected, as they reduce capacity of boom. See Chart No. 8 for deductions.
- Load Ratings** shown make no allowance for such factors as wind effect on lifted loads, ground conditions, out-of-level, operating speed or conditions that could be detrimental to safe operation of this machine. The operator must judge and reduce ratings accordingly.
- "With Outriggers" Load Ratings** are based on outriggers fully extended and set at a distance of 8 ft. 11 in. (2.72m) from the longitudinal axis of the carrier to the vertical axis of the outrigger float. Machine must be level and supported by outriggers with tires free of supporting surface.
- "Without Outriggers" Load Ratings** are based on lift limitations and conditions of tires inflated to pressures shown in Chart No. XX, and apply only when rear axle lockouts are engaged. Over front **"Pick and Carry" ratings** are limited to travel speed less than 2 1/2 mph (4 kmph) on firm, level ground with load centered over front of machine and load restrained from swinging.
- Maximum **Jib Load Ratings** are based on structural competence. Ratings at any radius shall not exceed Boom Load Ratings at same radius and shall not exceed maximum ratings shown.
- Jibs are intended to increase lifting height - not load radius. Maximum Jib Load Radius shall not exceed maximum Boom Load Radius of boom length on which jib is mounted.
- Method of powered boom extension is hydraulically synchronous with each section extendible a distance of 24 ft. 0 in. (7.32m). Powered sections resynchronize when boom is fully retracted or extended.
- The maximum load which may be telescoped is limited by hydraulic pressure, boom angle and lubrication. It is safe to telescope any load within limits of load rating chart.

**CHART
8**

Deductions to be made from Main Boom Rated Loads (in pounds)

Lattice Extension		Stowed	Erected
		550	1250
Jib		575	3300
Hook Block	On Boom Point	On Lattice Extension	On Jib
35 ton 4 sheave	425	-	-
10 ton 1 sheave	342	1875	-
8.5 ton ball hook	220	1650	4225

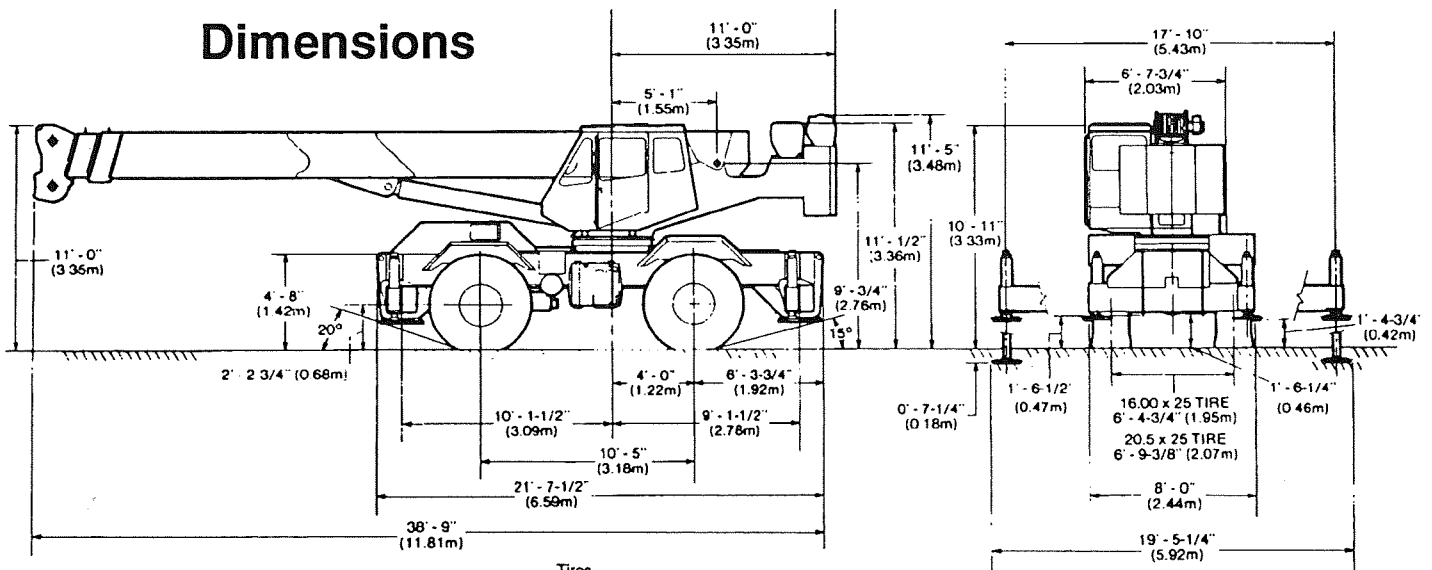
Deductions to be made from Lattice Extension Rated Loads (in pounds)

Jib		Stowed	Erected
		575	1250
Hook Block	On Boom Point	On Lattice Extension	On Jib
35 ton	325	425	-
10 ton	250	342	-
8.5 ton	175	220	1400

Deductions to be made from Jib Rated Loads (In pounds)

Hook Block	On Boom Point	On Lattice Extension	On Jib
35 ton	275	375	-
10 ton	225	300	-
8.5 ton	150	200	220

Dimensions



Tires	
16:00 x 25	20.5 x 25
37' - 10-1/4" (11.53m)	38' - 2-3/4" (11.65m)
64' - 4-7/8" (19.63m)	64' - 9-1/2" (19.74m)
47' - 11-1/4" (14.61m)	42' - 9-5/8" (13.04m)
69' - 4-3/4" (21.15m)	69' - 4-3/4" (21.15m)

Vehicle turning diameter - 4-wheel steer
- front axle steer
Vehicle clearance diameter - 4-wheel steer
- front axle steer



NOTE: All designs, specifications and components of the equipment described above are subject to change at the manufacturer's sole discretion at any time and without advance notice. Data published herein is informational in nature and shall not be construed to warrant suitability of the machine for any particular purpose as performance may vary with conditions encountered. The only warranty applicable is our standard warranty for this machine.

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