P&H® ΩMEGA®-18

18-ton Rough Terrain Crane
109-ft. (33.2m) maximum tip height

THE ULTIMATE IN PERFORMANCE, SERVICEABILITY, ECONOMY

- **Superior lifting performance** provided by rectangular full depth four-plate OMEGA boom that is welded inside and out. Four boom options available.
- **Telescope rated loads** for precise placement. Semi-fixed cylinder mounts decrease cylinder deflection under load and increase telescoping capacity.
- **Industry's most maneuverable RT crane** — four wheel drive/steer OMEGA with coordinated steering has shortest turning radius and lowest 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 OMEGA cab module allows placement of controls "in the palm of your hand", lots of leg and elbow room, and full vision of all activities.
- **A duty-cycle machine** — OMEGA's powerful winches offer high line speeds and pull. VOLUMATIK® hydraulic system provides optimum oil flow for fast crane functioning.
- **Less downtime** — OMEGA is "Pit-Stop" maintenance-proven. It's industry's most serviceable crane — engineered for parts commonality, accessibility and fast tear-down.

Specifications

specifications

BOOM: All boom sections are of full depth rectangular four-plate construction, welded inside and out, with adjustable nylon slider pads on top, bottom and sides. All powered sections are random sequencing, single lever controlled. Semi-fixed telescope cylinder mounts provide capacity to telescope rated loads. Boom point contains one idler and three load sheaves that are non-metallic. Sheaves are 11.875" (302 mm) P.D. with bronze bushings.

STANDARD:
A) Two (2) section full powered boom, 25.2' (7.7 m) retracted length, 43.2' (13.2 m) extended length, consisting of one base section and one powered section with boom point. Attachments are not offered for this boom.

OPTIONAL:
A) Three (3) section boom with manual extension, 26.23' (8.0) retracted length, 62.23' (19.0 m) extended length, consisting of one base section, one powered section and one manual extended and retracted section with boom point.

OPTIONAL:
B) Three (3) section full powered boom, 26.23' (8.0 m) retracted length, 62.23' (19.0 m) extended length, consisting of one base section and 2 powered sections with boom point.

OPTIONAL:
C) Four (4) section boom, with manual extension, 27' (8.2 m) retracted length, 80' (24.4 m) extended length, consisting of one base section, 2 powered sections and one manual extended and retracted section with boom point.

BOOM EXTENSION (OPTIONAL): 22' (6.7 m) swing-around tapered lattice structure with single 11.875" (302 mm) P.D. non-metallic point sheave with bronze bushing. 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.

JIB (OPTIONAL): 15' (4.6 m) underslung "A" frame section with single 11.875" (302 mm) P.D. non-metallic point sheave with bronze bushing. Easily installed from ground level by pivoting from its stored position on underside of boom base. Pin and guy line connected to boom point. For extending reach of boom.

AUXILIARY SHEAVE (OPTIONAL): Single 11.875" (302 mm) P.D. non-metallic sheave with bronze bushings, bracket-mounted on boom point, for use with single auxiliary winch line.

HOOK BLOCKS (OPTIONAL):
5 Ton — weighted hook with swivel and safety latch, for 1/2" (13 mm) wire rope.
10 Ton — Single sheave with swivel hook and safety latch, for 1/2" (13 mm) wire rope.
15 Ton — 2 sheave with swivel hook and safety latch, for 1/2" (13 mm) wire rope.
18 Ton — 3 sheave with swivel hook and safety latch, for 1/2" (12.7 mm) wire rope.

COUNTERWEIGHTS: For all boom options (except 3 section full power) — 3874 lb. (1757 kg) — non-removable weight is standard.

For 3 section full power boom with auxiliary winch — 5023 lb. (2278 kg)
For 3 section full power boom without an auxiliary winch — 5674 lb. (2574 kg)

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

CAB ACCESSORIES (OPTIONAL): Heater (diesel or propane fueled, thermostatically controlled), defroster fan, electric horn, electric windshield wiper and washer, electric roof window wiper, seat belt, fire extinguisher, drum rotation indicators for main and auxiliary winches, vandal-proof glass (lexan), noise-suppression kit for engine compartment, rotary roof beacon, rear view mirrors and warning light and buzzer monitoring power plant gauge panel.

CONTROLS: In front of operator are foot pedals for boom hoist, swing brake (optional), service brakes, and engine throttle. Left of steering wheel are console mounted double-acting levers for swing (with optional horn button) and telescope. At the right are levers for auxiliary winch (optional), slow speed main winch (optional), medium speed main winch and boom hoist. On right side of seat are floor mounted levers for swing brake and house lock. Drum rotation indicators (optional) are mounted on auxiliary and medium speed winch levers and a directional indicator (emergency flasher) switch on steering column. At operator's right are console mounted switches for starting aid, master ignition, engine start, engine stop, emergency/parking brake, windshield wiper, master lights (optional), defroster (optional), hi-low transmission range, steering mode selection and outrigger controls. Also on console are cigar lighter, high temperature warning light (optional), dash light, fuel gauge, air pressure gauge, circular level, gear range selector switch, forward-reverse selector lever and hand throttle. Console has prewired removable modules for ease of service.

OTHER CONTROLS: Located elsewhere are — 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 (inside right rear engine compartment) and front axle disconnect is automatic when transmission is shifted into high range.

MAIN WINCH: Braden Model PD12A single speed, mounted on rear of boom base. Planetary gearing with equal speed power raising and lowering. Infinitely variable controlled speed. Spring applied, hydraulically released load holding multiple disc brake is automatic. Three (3) speed winch option is available (additional pump, valve and lever are required). Complete with 400' (122 m) wire rope.

Drum: 9.625" (24.4 cm) P.D. x 13.75" (34.9 cm) wide with 16.25" (41.3 cm) dia. flanges.

Wire Rope: 1/2" (13 mm) dia. 8 x 19 spin resistant with 7 x 7 I.W.R.C.

Drum Capacity: 535 ft. (163m) 6 layers.

Line Pull (Max): 9250 lb. (4196 kg) 1st layer.

Line Pull (Permissible): 6,000 lb. (2721 kg) per part of line.

Line Speed Up (Max.):

Medium speed (std.)	216 fpm (66 m/m) 5th layer.
Slow speed (optional)	140 fpm (43 m/m) 5th layer.
High speed (optional)	320 fpm (98 m/m) 5th layer.

Single speed — single lever control for medium top speed.

Third speed option — 2 lever control for slow and medium speed, simultaneous operation of both levers for high speed.

AUXILIARY WINCH (OPTIONAL): Same as main winch — available only with single medium speed. Mounted on rear of revolving frame. Complete with 340' (104 m) wire rope and additional boom point idler sheave.

BOOM HOIST: One 10" (25.4 cm) I.D. cylinder, double-acting. Hydraulically powered raising and lowering with holding valve.

BOOM TELESCOPE: one 5.25' (12.7 cm) I.D. cylinder — double acting for each powered section. Hydraulically powered extending and retracting with holding valve.

HYDRAULIC SYSTEM: System utilizes either 3 or 4 gear type pumps — 3 if a (standard) single speed main winch is used, or 4 if (optional) three speed main winch is used. One double pump operating at 2173 rpm, provides 53 gpm (200.6 lpm) to the single speed main and/or auxiliary winches and 37.5 gpm (141.9 lpm) to the boom hoist and boom telescope cylinders. One single pump operating at 2500 rpm, provides 27.5 gpm (104.1 lpm) for steering, swing and outrigger circuits. An optional single pump can be added to provide 24 gpm (90.84 lpm) for 3 speeds to main winch. Total flow at 2500 engine rpm is 118 gpm (446.6 lpm) for 3 pump system and 142 gpm (537.5 lpm) for 4 pump system. From this flow, all but 37.5 gpm (141.9 lpm) is filtered to 10 microns on

return to the reservoir. Another filter in the pressure line of the swing, steer and outrigger circuit filters to 20 microns. Total filter capacity is 275 gpm (1040.9 lpm) to assure minimum fluid resistance and power loss while protecting seals in cylinders, valves and motors. The 90 gal. (340.7 liter) reservoir is located on right side of 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. Swing circuit has pressure compensated valve for swing metering control. Cable linkage connects valves to control levers. Air to oil cooler is optional.

SWING UNIT: Hydraulic motor driving through double reduction gear reducer to pinion gear, 360° continuous rotation to 3.49 RPM.

SWING GEAR: External cut spur gear 39.667" (100.75 cm) P.D. Ring gear dust cover is available (optional).

SWING BRAKE: STANDARD — Multiple disc brake integral with swing gear reducer, manually engaged with swing brake lever and hydraulically released by swing lever engagement. OPTIONAL — Caliper disc brake mounted on swing gear reducer, manually applied with swing brake pedal for slow dynamic stopping and swing brake lever for static holding. Hydraulically released by swing lever engagement.

HOUSE LOCK: Two position (front and rear) pin-in-hole lock manually engaged with house lock lever in cab is standard. A positive 360° position lock is available (optional.)

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.

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.

CARRIER: Driving and steering combinations available.

STANDARD

4x2x2 (Rear wheels drive, only front wheels steer) — For flat terrain with unlimited turning area

OPTIONAL

4x2x4 (Rear wheels drive. Four wheels steer) — For flat terrain with limited turning area.

OPTIONAL

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 (3234 kg/cm²) minimum yield steel and reinforced with rectangular box cross members of high strength 50,000 psi (3515 kg/cm²) minimum yield steel.

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. Beams are rectangular box members fabricated of high strength 50,000 psi (3515 kg/cm²) minimum yield steel. Four (4) fabricated 14" (35.6 cm) sq. floats are removable and stored on outrigger box. Extended spread is 16'-5½" (5.02 m) from C/L to C/L of vertical cylinders. Retracted within carrier width of 8'-0" (2.44 m).

STEERING OPTIONS: A) Front axle steer — pressure compensated hydrostatic power system fully controlled by steering wheel. B) Front and rear axle steer — pressure compensated hydrostatic power system fully controlled by steering wheel for front and rear axles. Two wheel, four wheel and crab steering mode selection is controlled by 3 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-594, ratio 16.65:1, steer and drive axle driven through differential with planetary in hubs. Axles are rigid mounted and have power steering. Manual drive disconnect for highway travel is standard.

REAR AXLE OPTIONS: A) Rockwell PRM-672, ratio 16.65:1 drive non-steering axle driven through differential with optional non-spin differential. B) Rockwell PSM-594, ratio 16:65:1, steer and drive axle driven through differential with planetary in hubs. Power steering, with optional no-spin differential. Axles are pivot-mounted with automatic hydraulic lockout cylinders to prevent oscillation (vertical movement of axle). Total oscillation attainable is 8 in. (20.3 cm).

SERVICE BRAKES: Air over hydraulic brakes on all 4 wheels. Rockwell 17¼ x 4 in. (438.15 x 101.6 mm) internal expanding shoe type, actuated by foot pedal in cab.

PARKING BRAKES: Maxi spring-set air chamber on 10 in. (25.4 cm) drum brake on transmission. Spring set and air released for safety.

TIRES: STANDARD — 14:00 x 24 — 16PR Tubeless Suregrip grader. OPTIONAL — 16:00 x 24 — 16PR Tubeless Suregrip grader; 16:00 x 24 Michelin XRB; 17.5 x 25 — 20PR Tubeless Suregrip Loader; 20.5 x 25 — 16PR Tubeless Suregrip Loader.

POWER PLANT:

ENGINE

Model	Detroit Diesel 3L-53T
Type	Diesel — direct injection
No. of cylinders	3
Cycle	2
Bore x Stoke, in (mm)	3.875 x 4.50 (99 x 114)
Displacement, cu.in.	159
(Liters)	(2.6)
Air Induction	Turbo-Charged
Air Cleaner	2 stage dry type — replaceable element
Oil Filter	Fullflow with replaceable element
Fuel Filter	Fullflow with replaceable element
Fuel Tank	50 gal. (189.3 liters) FHWA approved (Left side of carrier)
Cooling	Liquid-pressurized, recirculating by-pass
Radiator	Fin and tube core, thermostat controlled
Fan	6 Blade, suction type, 22 in. (559 mm) dia.
Starting	12 volt motor
Charging	12 volt - 42 amp alternator, negative ground
Battery	210 amp. hour
Compressor, air	12 CFM @ 1250 RPM
Governor, air	105-120 PSI
Horsepower, Gross	125 (93.2 Kilowatts) @ 2500 RPM

OPTIONAL POWER PLANT:

ENGINE

Model	Deutz Model F6L912
Type	Diesel - direct injection
No. of cylinders	6
Cycle	4
Bore x Stroke, in (mm)	3.938 x 4.719 (100 x 119.9)
Displacement, cu.in. (Liters)	346 (5.7)
Air Induction	Naturally aspirated
Air Cleaner	2 stage dry type - replaceable element
Oil Filter	Fullflow with replaceable element
Fuel Filter	Fullflow with replaceable element
Fuel Tank	50 gal. (189.3 Liters) FHWA approved (Left side of carrier)
Cooling	Air — 3.389 CFM air flow
Starting	12 volt motor
Charging	12 volt - 55 amp alternator, negative ground
Battery	210 amp. hour
Compressor, air	7.2 CFM @ 1250 RPM
Governor, air	105-120 PSI
Horsepower, Gross	112 (83.5 Kilowatts) @ 2500 RPM

TRANSMISSION

Model	Funk
Type	Powershift with 12.75 in. (324 mm) torque converter, 6 speeds equal forward and reverse, with high-low range shift. Electrically controlled, pneumatically operated gear shift. Neutral safety start.
Pump Drives	Gear driven off transmission power take-offs. Right hand PTO drive (for standard winch, boom hoist and telescope) equipped with manual disconnect for highway travel and engine starting.

MISCELLANEOUS EQUIPMENT (OPTIONAL): Sheet metal cover for control valves, boom angle indicator, boom length indicator, load moment device, automatic electrical hook block to boom point sheave protection (anti-two block) device, hook blocks, aux. boom point sheave with bracket mounting, air to oil hydraulic oil cooler, engine starting aid, fenders, pintle hooks, spare wheel, tire and mounting, headlights, taillights, directional lights, emergency flashers, clearance lights and reflectors, floodlights, large rear view mirrors, alcohol evaporator, air dryer, plumbing and controls for aux. winch, front bumper tow winch, electric back-up alarm, non-spin rear axle, warning beacon on cab roof, ring gear dust cover and 80 DBA sound reduction package.

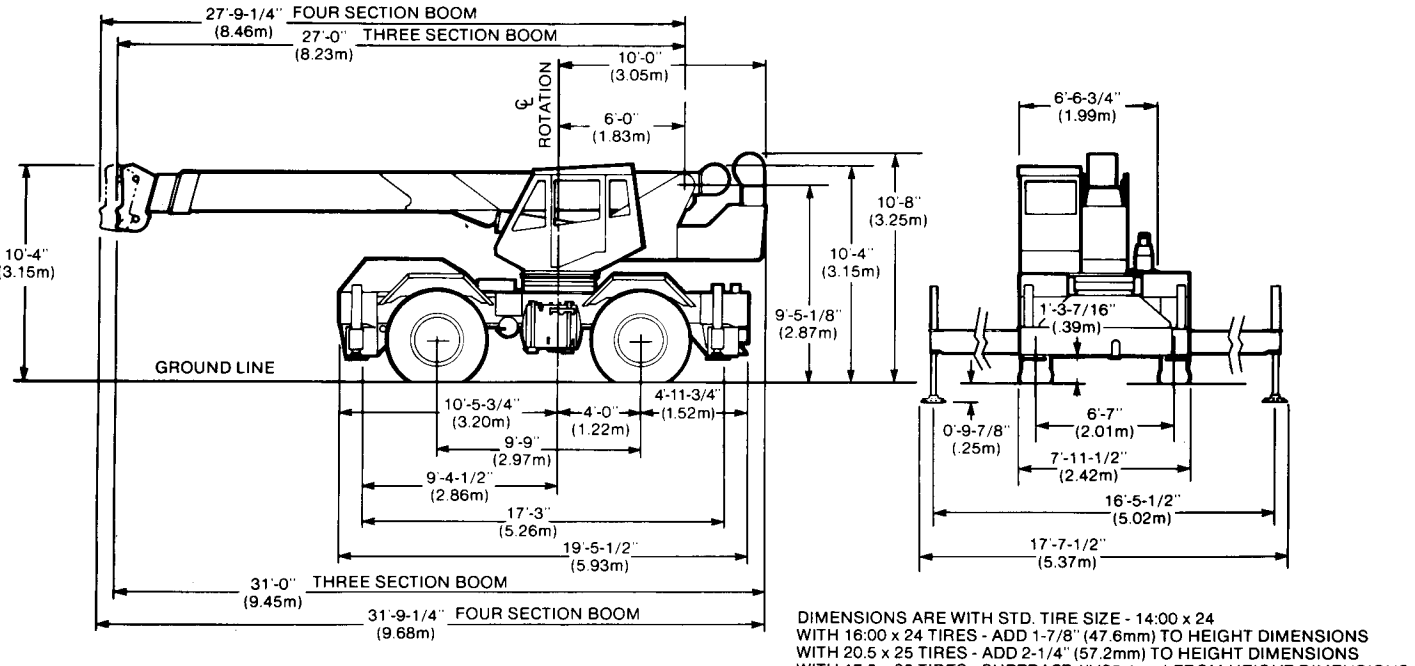
PERFORMANCE: Six (6) forward speeds, 6 reverse speeds. Performance in highest and lowest gear based on engine at full load rpm, 43,000 lb. gross vehicle weight, 14:00 x 24 tires, and good surface road. Maximum grade is under ideal conditions and limited by tire slip.

Low Range Speeds		High Range Speeds	
1st	1.9 mph (3.1 Kmph)	1st	4.6 mph (7.4 Kmph)
2nd	3.7 mph (6.0 Kmph)	2nd	8.8 mph (14.2 Kmph)
3rd	10.9 mph (17.5 Kmph)	3rd	25.8 mph (41.5 Kmph)

SHEAVE AND DRUM TO WIRE ROPE RATIOS: (Pitch Diameter)

	Sheave to Wire Rope	Drum to Wire Rope
Boom Main Sheave	23.8 to 1	— —
Boom Idler Sheave	23.8 to 1	— —
Boom Ext. Sheave	23.8 to 1	— —
Jib Sheave	23.8 to 1	— —
Main Winch	— —	19.3 to 1
Aux. Winch	— —	19.3 to 1

dimensions



DIMENSIONS ARE WITH STD. TIRE SIZE - 14:00 x 24
WITH 16:00 x 24 TIRES - ADD 1-7/8" (47.6mm) TO HEIGHT DIMENSIONS
WITH 20.5 x 25 TIRES - ADD 2-1/4" (57.2mm) TO HEIGHT DIMENSIONS
WITH 17.5 x 25 TIRES - SUBTRACT 1" (25.4mm) FROM HEIGHT DIMENSIONS

	TIRES			
	14:00 x 24	16.00 x 24	20.5 x 25	17.5 x 25
VEHICLE TURNING DIAMETER - 4-WHEEL STEER CRAMP	33'-11-1/2" (10.35m)	41'-2-5/8" (12.56m)	41'-5-3/4" (12.64m)	36'-0" (10.97m)
- FRONT AXLE STEER	56'-7-3/8" (17.26m)	71'-1-1/4" (21.67m)	71'-4-5/16" (21.75m)	60'-10-1/4" (18.55m)
VEHICLE CLEARANCE DIAMETER - 4-WHEEL STEER CRAMP	39'-2" (11.94m)	46'-0" (14.02m)	46'-0" (14.02m)	41'-2-7/8" (12.57m)
- FRONT AXLE STEER	61'-8" (18.80m)	75'-7-3/4" (23.05m)	75'-7-3/4" (23.05m)	65'-10-3/4" (20.08m)

VEHICLE WEIGHT:
Includes DD 3L-53T Engine with 6 Speed, 2 Range Powershift Transmission, 4x4x4 Drive/Steer Axles, Hydraulic Rear Axle Lockout, 16:00 x 24 - 16 PR Tires, Fenders, Hydraulic Outriggers, Pintle Hooks (Front & Rear), Hydraulic Oil Cooler, Air Dryer, Full Fuel and Hydraulic Reservoir Tanks, Three Speed Main Winch with 400' x 1/2" diameter Cable, Three Section Full Power Boom (26.23' - 62.23'), Auxiliary Boom Point Sheave, 18 Ton 3 Sheave Hook Block, Caliper Disc Swing Brake, Control Valve Cover, Cab Heater and Defroster Fan, Fire Extinguisher, and Counterweight:

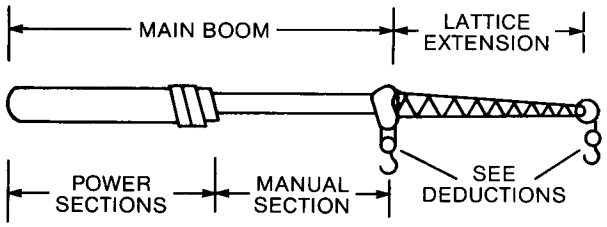
	G.V.W.	Front Axle Loading	Rear Axle Loading
	42,880 lbs. (19,447 kg)	19,770 lbs. (8,966 kg)	23,110 lbs. (10,481 kg)
Effect on Axle Loading by Adding:			
Auxiliary Winch w/340' x 1/2" dia. Cable	+ 99 lb. (45 kg)	- 175 lb. (- 79 kg)	+ 274 lb. (124 kg)
22' Lattice Boom Extension	567 lb. (257 kg)	649 lb. (294 kg)	- 82 lb. (- 37 kg)
15' "A" Frame Jib	506 lb. (229 kg)	897 lb. (406 kg)	- 391 lb. (- 177 kg)
Effect on Axle Loading by Substituting:			
Two Section Full Power Boom (25.2' - 43.2')	- 4139 lb. (- 1877 kg)	- 1322 lb. (- 600 kg)	- 2817 lb. (- 1277 kg)
Three Section Boom (1 Power, 1 Manual) (26.23' - 62.23')	- 2779 lb. (- 1260 kg)	- 282 lb. (- 128 kg)	- 2497 lb. (- 1132 kg)
Four Section Boom (2 Power, 1 Manual) (27' - 80')	- 539 lb. (- 244 kg)	2233 lb. (1013 kg)	- 2772 lb. (- 1257 kg)
14:00 x 24 - 16 PR Tires	- 388 lb. (- 176 kg)	- 194 lb. (- 88 kg)	- 194 lb. (- 88 kg)
17.5 x 25 - 16 PR Tires	- 56 lb. (- 26 kg)	- 28 lb. (- 13 kg)	- 28 lb. (- 13 kg)
20.5 x 25 - 16 PR Tires	1240 lb. (562 kg)	620 lb. (281 kg)	620 lb. (281 kg)
Deutz F6L-912 Engine	- 234 lb. (- 106 kg)	- 122 lb. (- 55 kg)	- 112 lb. (- 51 kg)
Rear Non-steer/Drive Axle	- 93 lb. (- 42 kg)	- 4 lb. (- 2 kg)	- 89 lb. (- 40 kg)
Front Steer/Non-Drive Axle	- 363 lb. (- 165 kg)	- 363 lb. (- 165 kg)	0 lb. (0 kg)
Single Speed Main Winch	- 92 lb. (- 42 kg)	- 43 lb. (- 20 kg)	- 49 lb. (- 22 kg)
Effect on Axle Loading by Removing:			
Auxiliary Boom Point Sheave	- 66 lb. (- 30 kg)	- 173 lb. (- 78 kg)	107 lb. (48 kg)
Pintle Hooks (Front & Rear)	- 54 lb. (- 24 kg)	- 27 lb. (- 12 kg)	- 27 lb. (- 12 kg)
Air Dryer	- 50 lb. (- 23 kg)	- 64 lb. (- 29 kg)	14 lb. (6 kg)
Heater & Defroster Fan	- 70 lb. (- 32 kg)	0 lb. (0 kg)	- 70 lb. (- 32 kg)
18 Ton 3 Sheave Hook Block	- 400 (- 181)	661 (- 300)	- 261 (- 119)
Hydraulic Oil Cooler	- 80 lb. (- 36 kg)	- 91 lb. (- 41 kg)	11 lb. (5 kg)
Fenders	- 406 lb. (- 184 kg)	- 203 lb. (- 92 kg)	- 203 lb. (- 92 kg)
Control Valve Cover	- 62 lb. (- 28 kg)	- 7 lb. (- 3 kg)	- 55 lb. (- 25 kg)

operating instructions

This P&H crane meets the requirements of ANSI B30.15 (1973). 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 originally manufactured and equipped by Harnischfeger Corporation.

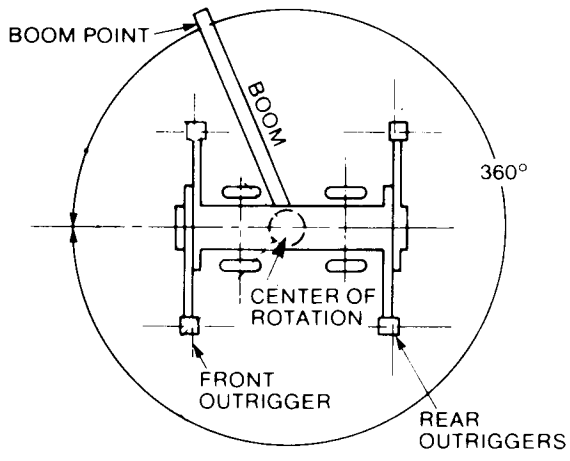
WARNING: Operation of this machine in excess of rated loads, in areas of chart not rated, or with disregard of instructions voids this warranty.

1. LOAD RADIUS is horizontal distance from axis of rotation (before loading) to center of vertical hoist line (after loading). Actual working radii should be an accurate measurement.
2. Boom, lattice extension and jib point height dimensions are measured from ground to center of load sheave.
3. 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.
4. 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 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).
5. To determine LOAD RATINGS in-between those shown on chart, proceed as follows:
   a. for boom lengths not shown, use rating of next longer rated boom:
   b. for load radii not shown, use rating of next longer rated radius.
6. Deduct weight from LOAD RATINGS of all suspended load handling devices such as hooks, hookblocks, slings, buckets, etc. as they are considered part of the load. See table for deductions.
7. Deduct weight from LOAD RATINGS of fixed boom attachments (jib, boom extension) either stowed or erected, as they reduce capacity of boom. See table for deductions.
8. 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 these factors and reduce ratings accordingly.
9. "WITH OUTRIGGERS" LOAD RATINGS are based on outriggers fully extended and set at a distance of 8 ft. 2.75 in. (2.51 m) from longitudinal axis of carrier to vertical axis of outrigger float. Machine must be level and supported by outriggers with tires free of supporting surface.
10. "WITHOUT OUTRIGGERS" LOAD RATINGS are based on lift limitations and conditions of tires inflated to pressures shown in table, and apply only when rear axle lockouts are engaged. Over front "Pick and Carry" ratings are limited to travel speed less than 2½ mph (4 kmph) on firm, level ground with load centered over front of machine and load restrained from swinging.
11. 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.
12. 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.
13. For bucket ratings on jib, deduct 20% from maximum JIB LOAD RATINGS.
14. Method of telescoping boom is random with each section extendible a distance of 18 feet (5.49 m). Sections resynchronize when boom is fully retracted or extended.
15. 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.

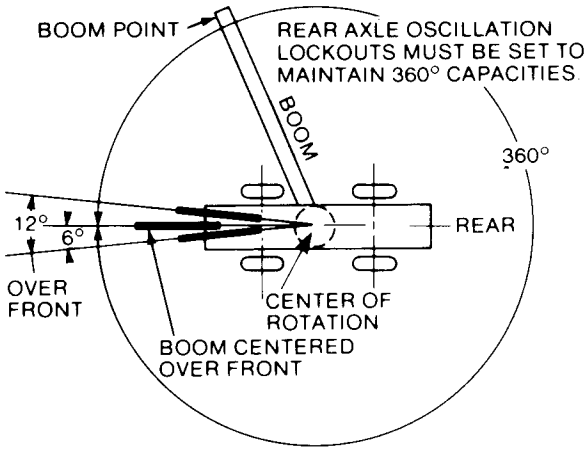


areas of operation

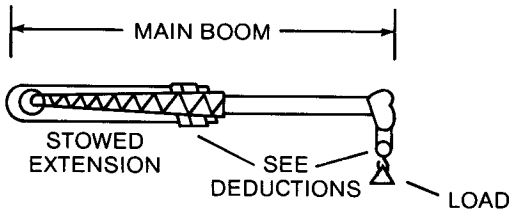
ON OUTRIGGERS

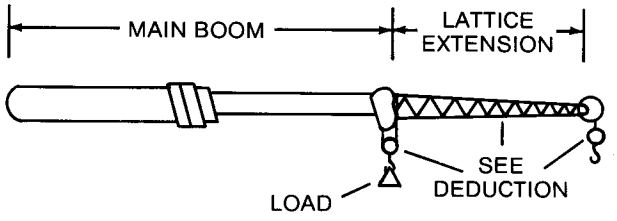


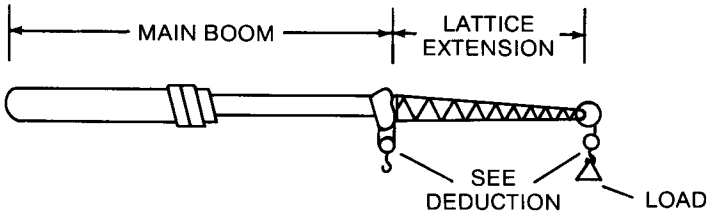
ON RUBBER

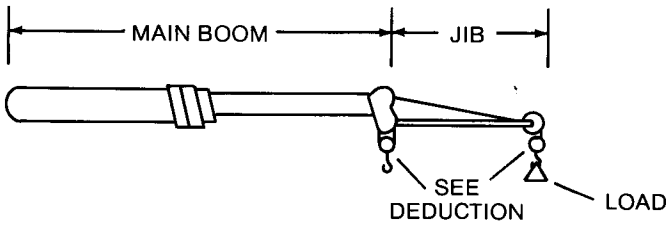


deductions to be made from rated loads









DEDUCTION TO BE MADE FROM MAIN BOOM RATED LOADS (IN POUNDS) (Hoisting From Boom Point)			
STOWED ATTACHMENT			
Lattice Extension (Stored on Boom Base)			400
Jib (Stored on Boom Base)			400
HOOK BLOCK ON BOOM POINT			
5 TON BALL HOOK	10 TON 1 SHEAVE	15 TON 2 SHEAVES	18 TON 3 SHEAVES
105	325	360	400
ERECTED ATTACHMENT			
	WITHOUT HOOK BLOCK	WITH 5 TON BALL HOOK	WITH 10 TON HOOK BLOCK
Lattice Extension	700	1000	1650
Jib	700	950	1450

DEDUCTION TO BE MADE FROM LATTICE EXTENSION RATED LOADS (IN POUNDS) (Hoisting From Extension Point)		
TOTAL DEDUCTION FOR ERECTED CONFIGURATION		
	Hook Block On Extension Point	
Hook Block On Boom Point	5 TON BALL HOOK ONE PART LINE	10 TON HOOK BLOCK TWO PART LINE
18 Ton — 3 Sheaves	405	625
15 Ton — 2 Sheaves	375	595
10 Ton — 1 Sheave	350	570
5 Ton Ball Hook	185	405

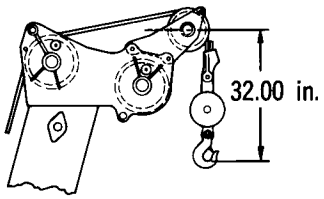
DEDUCTION TO BE MADE FROM JIB RATED LOADS (IN POUNDS) (Hoisting From Jib Point)		
TOTAL DEDUCTION FOR ERECTED CONFIGURATION		
	Hook Block On Jib Point	
Hook Block On Boom Point	5 TON BALL HOOK ONE PART LINE	10 TON HOOK BLOCK TWO PART LINE
18 Ton — 3 Sheaves	435	655
14 Ton — 2 Sheaves	405	625
10 Ton — 1 Sheave	375	595
5 Ton Ball Hook	195	415

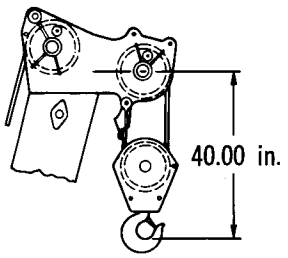
PERMISSIBLE HOIST LINE LOAD IN POUNDS								
Parts Of Line	1	2	3	4	5	6	7	8
Main Winch or Auxiliary	6000	12000	18000	24000	30000	36000	—	—
½" Dia. wire rope — Breaking strength 23,400 lbs. (10,614 kg) — Permissible strength 6,686 lbs. (3,033 kg)								

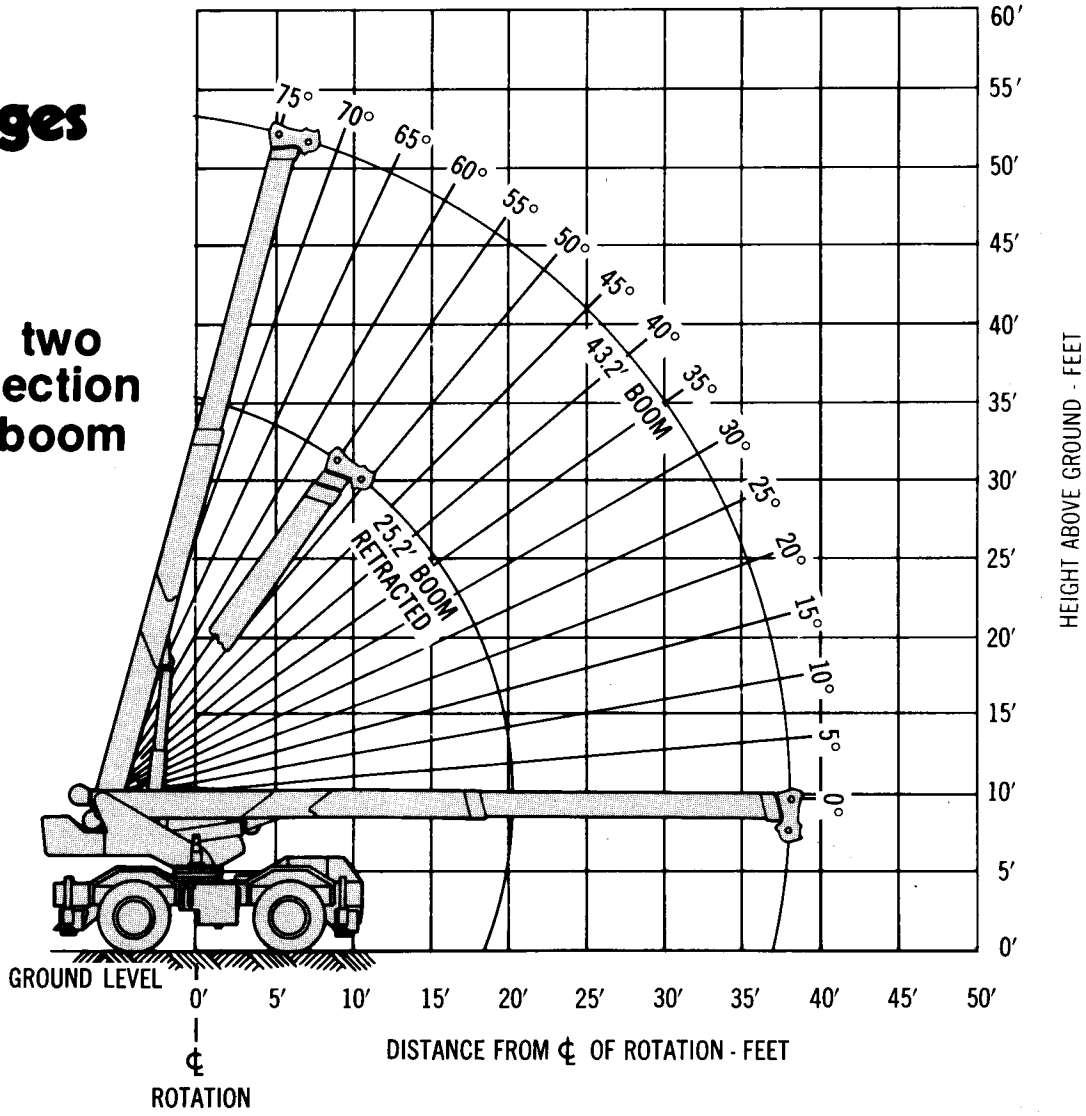
NOTE: OPERATION OF THIS EQUIPMENT IN EXCESS OF LOAD RATINGS AND DISREGARD OF INSTRUCTIONS VOIDS THE WARRANTY.

working ranges

two section boom







PCSA CLASS 10—71 two section full powered boom

with outriggers fully extended and set

rated crane loads in pounds — boom in 360° work areas

BOOM LENGTH (FEET)										
	25.2		30.		34.		39.		43.2	
LOAD RADIUS (FEET)	LOADED BOOM ANGLE △°	RATED LOAD POUNDS	LOADED BOOM ANGLE △°	RATED LOAD POUNDS	LOADED BOOM ANGLE △°	RATED LOAD POUNDS	LOADED BOOM ANGLE △°	RATED LOAD POUNDS	LOADED BOOM ANGLE △°	RATED LOAD POUNDS
10	56	36000	63	36000	66	35000	70	35000	72	35000
12	50	32000	58	32000	63	32000	67	31000	70	31000
15	39	26000	50	26000	56	26000	62	26000	65	26000
20	—	—	35	20000	45	20000	52	20000	57	20000
25	TELESCOPE		—	—	29	14200	42	14200	48	14200
30	CYLINDERS MUST BE						27	10400	37	10400
35	FULLY RETRACTED								22	8000
37.17	AND AGAINST STOPS								0	7100

32U1583

RATINGS ABOVE THE HEAVY LINE ARE BASED ON STRUCTURAL COMPETENCE AND NOT ON MACHINE STABILITY.

BOOM RATINGS MUST BE REDUCED BY WEIGHT OF BOOM ATTACHMENTS AND LOAD HANDLING DEVICES. SEE TABLE.

"on rubber" . . . . two section boom

rated crane loads in pounds — main boom — without outriggers

RATED LOADS FOR 16.00 x 24 — 16 PLY AND MICHELIN "XRB" TIRES				LOAD RADIUS (FEET)	RATED LOADS FOR 14.00 x 24 — 16 PLY TIRES			
STATIONARY		CREEP	2½ MPH		STATIONARY		CREEP	2½ MPH
± 6° ARC OVER FRONT	360° ARC	BOOM CENTERED OVER FRONT			± 6° ARC OVER FRONT	360° ARC	BOOM CENTERED OVER FRONT	
30000	17700	30000	20400	10①	27800	17600	23600	18800
26300	13100	26300	17500	12①	23800	13100	20200	16100
17600	9000	17600	14200	15①	17600	9000	16500	13000
10600	5700	10600	10000	20	10600	5700	10600	9000
7200	3800	7200	7200	25	7200	3800	7200	7200
5300	2700	5300	5300	30	5300	2700	5300	5300
4000	1900	4000	4000	35	4000	1900	4000	4000
3500	1500	3500	3500	37.17	3500	1500	3500	3500

32Q1055

WARNING: DO NOT EXCEED RATED LOAD AT RADIUS SHOWN OR A TIPPING CONDITION WILL OCCUR.

32Q1077

①RATINGS LIMITED TO FULLY RETRACTED BOOM.

RATED LOADS FOR 20.50 x 25 — 16 PLY TIRES				LOAD RADIUS (FEET)	RATED LOADS FOR 17.50 x 25 — 20 PLY TIRES			
STATIONARY		CREEP	2½ MPH		STATIONARY		CREEP	2½ MPH
± 6° ARC OVER FRONT	360° ARC	BOOM CENTERED OVER FRONT			± 6° ARC OVER FRONT	360° ARC	BOOM CENTERED OVER FRONT	
30000	17700	26000	17300	10 ①	30000	17700	26200	20100
26200	13100	22300	14700	12 ①	26200	13100	22500	17200
17600	9000	17600	11800	15 ①	17600	9000	17600	13900
10600	5700	10600	8100	20	10600	5700	10600	9800
7200	3800	7200	6800	25	7200	3800	7200	7200
5300	2700	5300	5300	30	5300	2700	5300	5300
4000	1900	4000	4000	35	4000	1900	4000	4000
3500	1500	3500	3500	37.17	3500	1500	3500	3500

32Q1089

32Q1085

WARNING: DO NOT EXCEED RATED LOAD AT RADIUS SHOWN OR A TIPPING CONDITION WILL OCCUR.

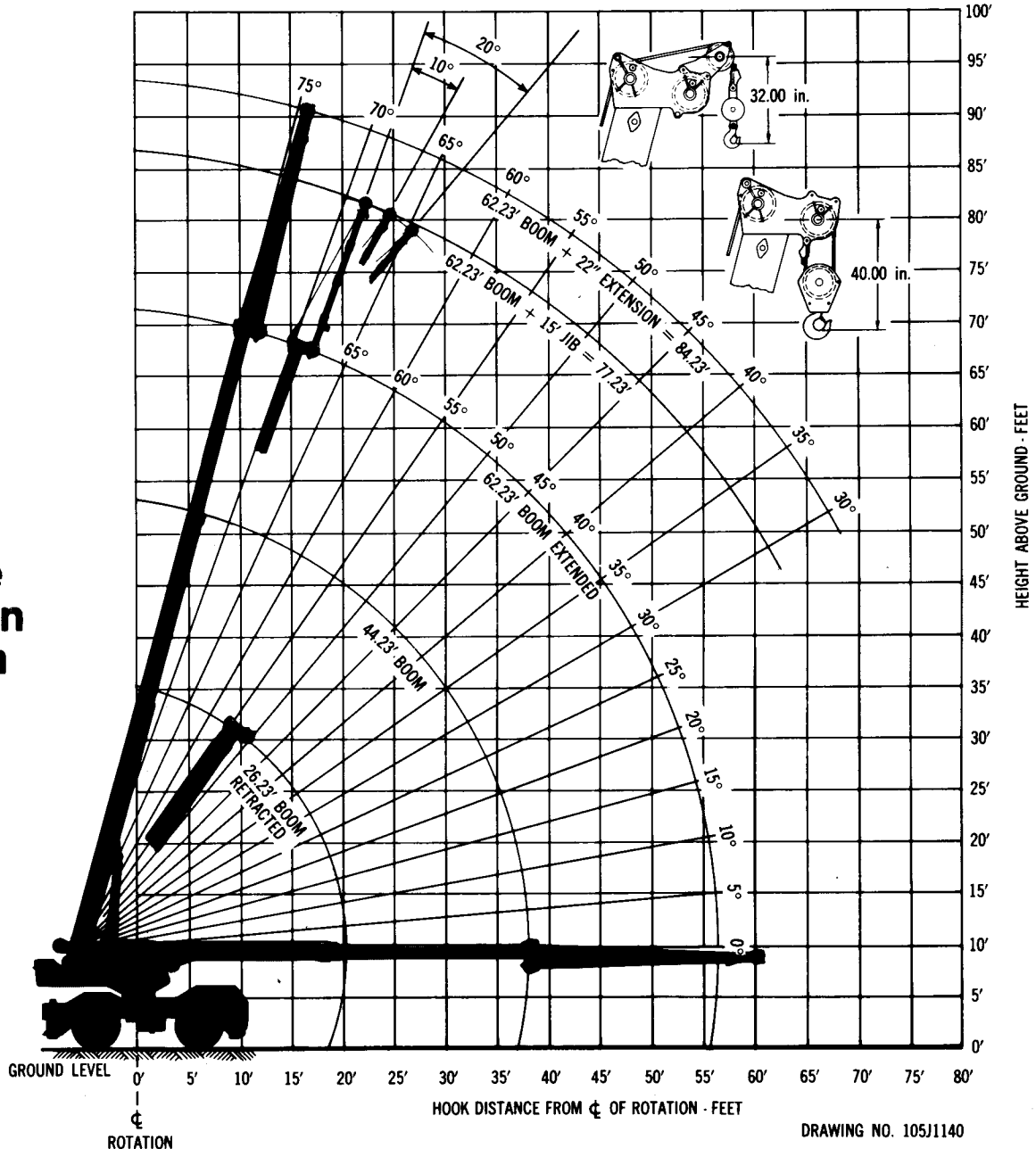
① RATINGS LIMITED TO FULLY RETRACTED BOOM.

WARNING: LOAD RATINGS WITHOUT OUTRIGGERS DEPEND ON TIRE CAPACITY AND CONDITION, INFLATED PER TABLE, AND APPLY ONLY WHEN REAR AXLE LOCKOUTS ARE ENGAGED.

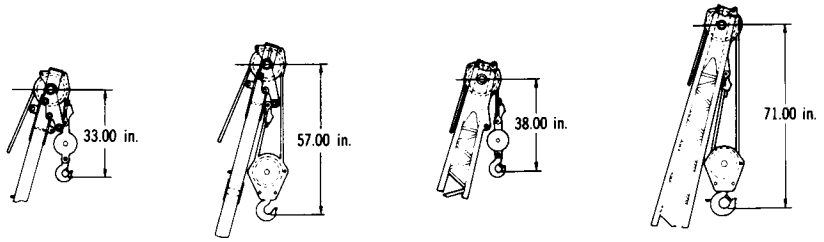
TIRE INFLATION (PSI)				
SIZE	STAT.	CREEP	2½ MPH	ROADING
14:00x24	90	90	85	60
16:00x24	80	80	60	50
17:50x25	95	95	85	60
20:50x25	65	65	50	40

working ranges

three section boom



WARNING: Do not exceed 74 ft. load radius with erected boom extension or jib or a tipping condition will occur.



70							28	2400	70				
74							21	2100	74				

32U1581

PCSA CLASS 10—66 three section boom with manual section

and outriggers fully extended and set

rated crane loads in pounds — boom in 360° work areas

BOOM LENGTH (FEET)									WITH LATTICE EXTENSION				
MANUAL SECTION RETRACTED					MANUAL SECTION EXTENDED				MANUAL RETRACTED		MANUAL EXTENDED		
26.23			44.23		44.23		62.23		66.23		84.23		
LOAD RADIUS (FEET)	LOADED BOOM ANGLE △°	RATED LOAD POUNDS	LOADED BOOM ANGLE △°	RATED LOAD POUNDS	LOADED BOOM ANGLE △°	RATED LOAD POUNDS	LOADED BOOM ANGLE △°	RATED LOAD POUNDS	LOADED BOOM ANGLE △°	RATED LOAD POUNDS	LOADED BOOM ANGLE △°	RATED LOAD POUNDS	LOAD RADIUS (FEET)
10	57	36000	72	34000	72	33000	SEE WARNING NOTE 2		SEE WARNING NOTE 3		SEE WARNING NOTE 3		10
12	51	32000	69	32000	69	31000							12
15	41	26000	65	26000	65	26000	73	23000	73	8600			15
20	13	20000	57	20000	57	20000	68	18000	68	7700	74	8600	20
25	—	—	48	14000	48	15400	63	15000	64	6700	70	8000	25
30	TELESCOPE CYLINDERS MUST BE FULLY RETRACTED AND AGAINST STOPS		38	10100	38	11300	58	10900	59	5700	67	7500	30
35			25	7500	25	8700	52	8400	53	4900	63	6500	35
40							45	6600	47	4300	59	5600	40
45							38	5400	41	3800	55	4800	45
50							28	4400	34	3400	50	4300	50
55							14	3600	24	3100	46	3800	55
60									6	2800	40	3200	60
65									—	—	35	2700	65
70											28	2300	70
74											20	2000	74

32U1579

W

2. FOR BOOM LENGTHS LESS TH EXTENDED, THE RATED LOAD ONLY IN THE COLUMN HEAD ANGLES NOT SHOWN USE RA
3. FOR BOOM LENGTHS LES RETRACTED AND LESS THAN THE LATTICE BOOM EXTENSI BOOM ANGLE ONLY IN THE C AND 84.23 FOOT BOOM RESPE RATING OF NEXT LOWER BOO

PCSA CLASS 10—70 three section full powered boom

with outriggers fully extended and set

rated crane loads in pounds — boom in 360° work areas

BOOM LENGTH (FEET)							WITH LATTICE EXTENSION		
26.23			44.23		62.23		84.23		
LOAD RADIUS (FEET)	LOADED BOOM ANGLE △°	RATED LOAD POUNDS	LOADED BOOM ANGLE △°	RATED LOAD POUNDS	LOADED BOOM ANGLE △°	RATED LOAD POUNDS	LOADED BOOM ANGLE △°	RATED LOAD POUNDS	LOAD RADIUS (FEET)
10	57	36000	73	33000			SEE WARNING NOTE 1		10
12	51	32000	70	31000					12
15	41	26000	66	26000	74	23000			15
20	13	20000	58	20000	69	18000	74	8600	20
25	—	—	49	15500	64	15500	71	8000	25
30	TELESCOPE CYLINDERS MUST BE FULLY RETRACTED AND AGAINST STOPS		39	11200	58	11200	67	7500	30
35			26	8300	52	8300	64	6500	35
40					46	7000	60	5600	40
45					38	5600	55	4800	45
50					29	4500	51	4300	50
55					15	3700	46	3900	55
60							41	3400	60
65							35	2800	65
70							28	2400	70
74							21	2100	74

32U1581

PCSA CLASS 10—66 three section boom with manual sectio

and outriggers fully extended and se

rated crane loads in pounds — boom in 360° work areas

BOOM LENGTH (FEET)									WITH LATTICE EXTE		
MANUAL SECTION RETRACTED					MANUAL SECTION EXTENDED				MANUAL RETRACTED		MANU
26.23			44.23		44.23		62.23		66.23		
LOAD RADIUS (FEET)	LOADED BOOM ANGLE △°	RATED LOAD POUNDS	LOADED BOOM ANGLE △°	RATED LOAD POUNDS	LOADED BOOM ANGLE △°	RATED LOAD POUNDS	LOADED BOOM ANGLE △°	RATED LOAD POUNDS	LOADED BOOM ANGLE △°	RATED LOAD POUNDS	LOADE BOOM ANGLE △°
10	57	36000	72	34000	72	33000	SEE WARNING NOTE 2		SEE WARNING NOTE 3		SEE
12	51	32000	69	32000	69	31000					
15	41	26000	65	26000	65	26000	73	23000	73	8600	
20	13	20000	57	20000	57	20000	68	18000	68	7700	74
25	—	—	48	14000	48	15400	63	15000	64	6700	70
30	TELESCOPE CYLINDERS MUST BE FULLY RETRACTED AND AGAINST STOPS		38	10100	38	11300	58	10900	59	5700	67
35			25	7500	25	8700	52	8400	53	4900	63
40							45	6600	47	4300	59
45							38	5400	41	3800	55
50							28	4400	34	3400	50
55							14	3600	24	3100	46
60									6	2800	40
65									—	—	35
70											28
74											20

ed boom

t outriggers

ADS FOR 6 PLY TIRES	
CREEP	2½ MPH
BOOM CENTERED OVER FRONT	
23300	18500
19800	15600
15900	12400
11600	8800
7700	6300
5300	4700
3700	3400
3400	3200
2500	2500
1900	1900
1300	1300

32Q1076

WARNING

1. FOR BOOM LENGTHS LESS THAN 84.23 FEET WITH LATTICE EXTENSION ERECTED, THE RATED LOADS ARE DETERMINED BY BOOM ANGLE ONLY IN THE COLUMN HEADED BY 84.23 FOOT BOOM. FOR BOOM ANGLES NOT SHOWN, USE RATING OF NEXT LOWER BOOM ANGLE.

RATINGS ABOVE THE HEAVY LINE ARE BASED ON STRUCTURAL COMPETENCE AND NOT ON MACHINE STABILITY.

BOOM RATINGS MUST BE REDUCED BY WEIGHT OF BOOM ATTACHMENTS AND LOAD HANDLING DEVICES. SEE TABLE.

S FOR LY TIRES	
CREEP	2½ MPH
BOOM CENTERED OVER FRONT	
25900	19800
22100	16800
17900	13400
11700	9400
7700	7000
5300	5200
3700	3700
3400	3400
2500	2500
1900	1900
1300	1300

32Q1084

WN

SION	
AL EXTENDED	
84.23	
RATED LOAD POUNDS	LOAD RADIUS (FEET)
	10
WARNING	12
IOTE 3	15
8600	20
8000	25
7500	30
6500	35
5600	40
4800	45
4300	50
3800	55
3200	60
2700	65
2300	70
2000	74

32U1579

WARNINGS

2. FOR BOOM LENGTHS LESS THAN 62.23 FEET WITH MANUAL SECTION EXTENDED, THE RATED LOADS ARE DETERMINED BY BOOM ANGLE ONLY IN THE COLUMN HEADED BY 62.23 FOOT BOOM. FOR BOOM ANGLES NOT SHOWN USE RATING OF NEXT LOWER BOOM ANGLE.
3. FOR BOOM LENGTHS LESS THAN 62.23 FEET WITH MANUAL RETRACTED AND LESS THAN 84.23 FEET WITH MANUAL EXTENDED, THE LATTICE BOOM EXTENSION RATED LOADS ARE DETERMINED BY BOOM ANGLE ONLY IN THE COLUMN HEADED BY 62.23 FOOT BOOM AND 84.23 FOOT BOOM RESPECTIVELY. FOR ANGLES NOT SHOWN, USE RATING OF NEXT LOWER BOOM ANGLE.

WARNING:

LOAD RATINGS WITHOUT OUTRIGGERS DEPEND ON TIRE CAPACITY AND CONDITION, INFLATED PER TABLE, AND APPLY ONLY WHEN REAR AXLE LOCKOUTS ARE ENGAGED.

TIRE INFLATION (PSI)				
SIZE	STAT.	CREEP	2½ MPH	ROADING
14:00x24	90	90	85	60
16:00x24	80	80	60	50
17:50x25	95	95	85	60
20:50x25	65	65	50	40

TO HELP PREVENT TIPPING CONDITIONS WHEN "LIFTING ON RUBBER", IT IS RECOMMENDED THAT —

1. MINIMUM BOOM LENGTHS BE USED.
2. OUTRIGGERS BE EXTENDED AS FAR AS POSSIBLE AND CLEAR OF GROUND.

WARNING: SEE AREAS OF OPERATION PLATE FOR WORKING RANGES.

WARNING: WHEN TRANSPORTING A LOAD MACHINE MUST BE ON FIRM, LEVEL SURFACE WITH MECHANICAL HOUSELOCK ENGAGED AND LOAD CENTERED OVER FRONT OF MACHINE AND RESTRAINED FROM SWINGING. DO NOT EXCEED 2½ MPH (4 KMPH) VEHICLE SPEED.

CREEP IS MOTION FOR LESS THAN 200 FT. IN A 30 MIN. PERIOD & NOT EXCEEDING 1 MPH.

STABILITY RATINGS DO NOT EXCEED 85% OF TIPPING LOADS WITH AUXILIARY SHEAVE ON BOOM POINT AND STOWED BOOM EXTENSION.

WARNING: "WITHOUT OUTRIGGER" LIFTS WITH JIB OR BOOM EXTENSION IN WORKING POSITION ARE PROHIBITED.

"on rubber" . . . three section full powered boom

rated crane loads in pounds — main boom — without outriggers

RATED LOADS FOR 16.00 x 24 — 16 PLY AND MICHELIN "XRB" TIRES				LOAD RADIUS (FEET)	RATED LOADS FOR 14.00 x 24 — 16 PLY TIRES			
STATIONARY		CREEP	2½ MPH		STATIONARY		CREEP	2½ MPH
± 6° ARC OVER FRONT	360° ARC	BOOM CENTERED OVER FRONT			± 6° ARC OVER FRONT	360° ARC	BOOM CENTERED OVER FRONT	
32000	20800	30200	20100	10①	27700	18300	23300	18500
27000	15000	25900	17000	12①	23500	15000	19800	15600
20700	10300	20700	13600	15①	18900	10300	15900	12400
11700	6100	11700	9600	20	11700	6100	11600	8800
7700	3800	7700	7100	25	7700	3800	7700	6300
5300	2300	5300	5300	30	5300	2300	5300	4700
3700	1300	3700	3700	35	3700	1300	3700	3400
3400	1000	3400	3400	40	3400	1000	3400	3200
2500	800	2500	2500	45	2500	800	2500	2500
1900	—	1900	1900	50	1900	—	1900	1900
1300	—	1300	1300	55	1300	—	1300	1300

32Q1054

32Q1076

WARNING: DO NOT EXCEED RATED LOAD AT RADIUS SHOWN OR A TIPPING CONDITION WILL OCCUR.

①RATINGS LIMITED TO FULLY RETRACTED BOOM.

RATED LOADS FOR 20.50 x 25 — 16 PLY TIRES				LOAD RADIUS (FEET)	RATED LOADS FOR 17.50 x 25 — 20 PLY TIRES			
STATIONARY		CREEP	2½ MPH		STATIONARY		CREEP	2½ MPH
± 6° ARC OVER FRONT	360° ARC	BOOM CENTERED OVER FRONT			± 6° ARC OVER FRONT	360° ARC	BOOM CENTERED OVER FRONT	
30500	20500	25600	17000	10 ①	30500	19600	25900	19800
25900	15000	21900	14300	12 ①	25900	15000	22100	16800
20800	10300	17700	11300	15 ①	20800	10300	17900	13400
11700	6100	11700	7700	20	11700	6100	11700	9400
7700	3800	7700	5600	25	7700	3800	7700	7000
5300	2300	5300	4000	30	5300	2300	5300	5200
3700	1300	3700	2900	35	3700	1300	3700	3700
3400	1000	3400	2700	40	3400	1000	3400	3400
2500	800	2500	2000	45	2500	800	2500	2500
1900	—	1900	1400	50	1900	—	1900	1900
1300	—	1300	1000	55	1300	—	1300	1300

32Q1088

32Q1084

WARNING: DO NOT EXCEED RATED LOAD AT RADIUS SHOWN OR A TIPPING CONDITION WILL OCCUR.

①RATINGS LIMITED TO FULLY RETRACTED BOOM.

"on rubber"... three section manual boom

rated crane loads in pounds — main boom — without outriggers

RATED LOADS FOR 16.00 x 24 — 16 PLY AND MICHELIN "XRB" TIRES				LOAD RADIUS (FEET)	RATED LOADS FOR 14.00 x 24 — 16 PLY TIRES			
STATIONARY		CREEP	2½ MPH		STATIONARY		CREEP	2½ MPH
± 6° ARC OVER FRONT	360° ARC	BOOM CENTERED OVER FRONT			± 6° ARC OVER FRONT	360° ARC	BOOM CENTERED OVER FRONT	
30000	17900	29900	19800	10①	27200	17300	22900	18200
28500	13100	25600	16800	12①	23100	13100	19500	15300
18000	8800	18000	13400	15①	18000	8800	15700	12200
10200	5100	10200	9600	20	10200	5100	10200	8600
6700	3100	6700	6700	25	6700	3100	6700	6400
4500	1900	4500	4500	30	4500	1900	4500	4500
3200	1000	3200	3200	35	3200	1000	3200	3200
2900	700	2900	2900	40	2900	700	2900	2900
2100	—	2100	2100	45	2100	—	2100	2100
1500	—	1500	1500	50	1500	—	1500	1500
1000	—	1000	1000	55	1000	—	1000	1000

32Q1010

32Q1009

WARNING: DO NOT EXCEED RATED LOAD AT RADIUS SHOWN OR A TIPPING CONDITION WILL OCCUR.

①RATINGS LIMITED TO FULLY RETRACTED BOOM.

RATED LOADS FOR 20.50 x 25 — 16 PLY TIRES				LOAD RADIUS (FEET)	RATED LOADS FOR 17.50 x 25 — 20 PLY TIRES			
STATIONARY		CREEP	2½ MPH		STATIONARY		CREEP	2½ MPH
± 6° ARC OVER FRONT	360° ARC	BOOM CENTERED OVER FRONT			± 6° ARC OVER FRONT	360° ARC	BOOM CENTERED OVER FRONT	
30000	17900	25300	16600	10①	29800	17900	25600	19400
25500	13100	21600	14000	12①	25400	13100	21800	16500
18000	8800	17500	11100	15①	18000	8800	17700	13200
10200	5100	10200	7700	20	10200	5100	10200	9300
6700	3100	6700	5600	25	6700	3100	6700	6700
4500	1900	4500	4100	30	4500	1900	4500	4500
3200	1000	3200	3000	35	3200	1000	3200	3200
2900	700	2900	2400	40	2900	700	2900	2900
2100	—	2100	2100	45	2100	—	2100	2100
1500	—	1500	1500	50	1500	—	1500	1500
1000	—	1000	1000	55	1000	—	1000	1000

32Q1014

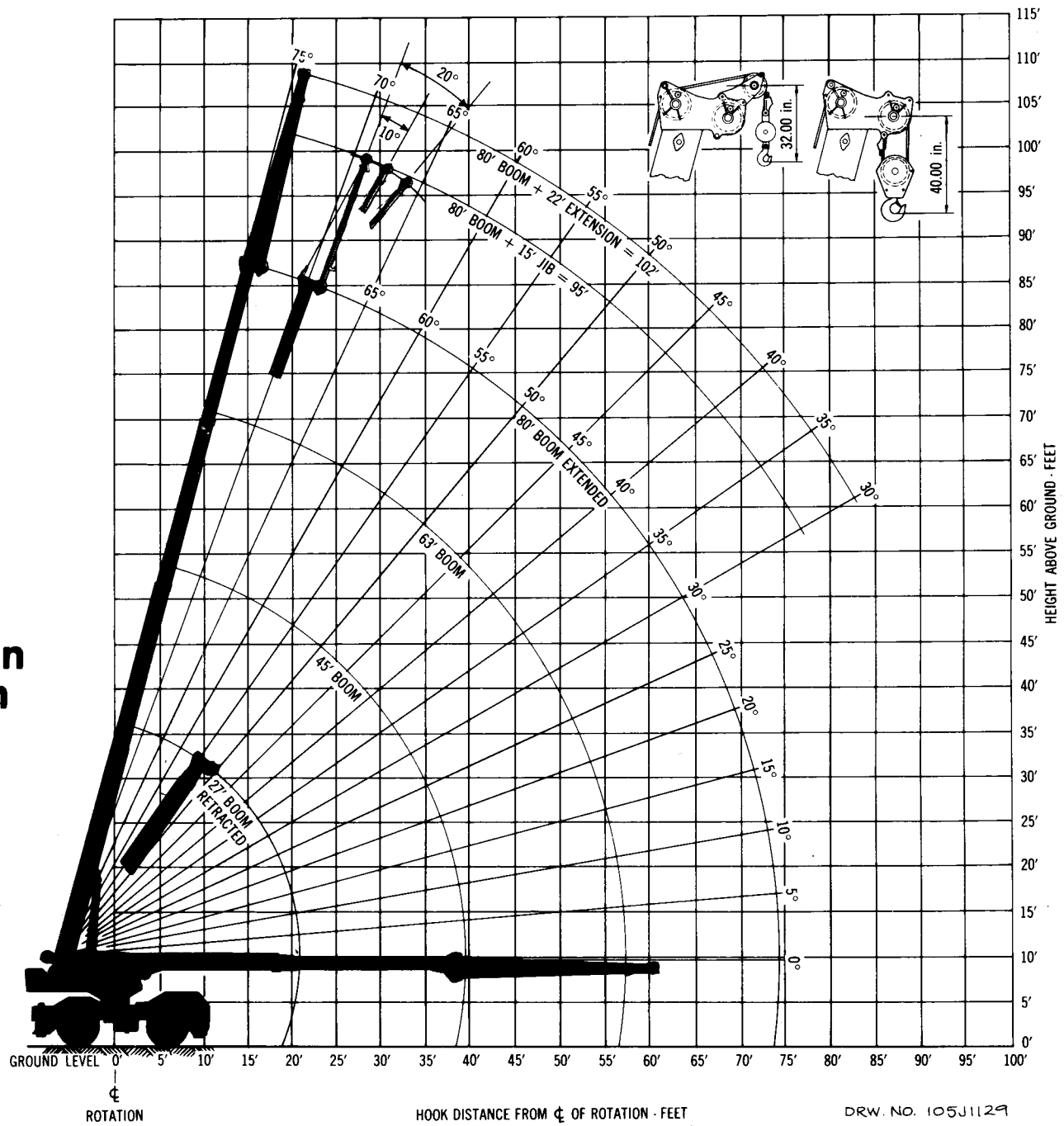
32Q1013

WARNING: DO NOT EXCEED RATED LOAD AT RADIUS SHOWN OR A TIPPING CONDITION WILL OCCUR.

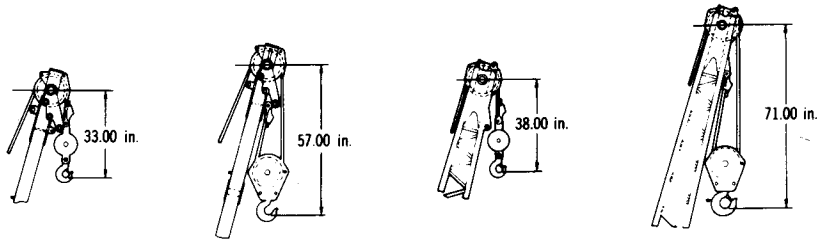
①RATINGS LIMITED TO FULLY RETRACTED BOOM.

working ranges

four section boom



WARNING: Do not exceed 90 ft. load radius with erected boom extension or jib or a tipping condition will occur.



PCSA CLASS 10—57 four section boom with manual section and outriggers fully extended and set

rated crane loads in pounds — boom in 360° work areas

BOOM LENGTH (FEET)									WITH LATTICE EXTENSION				
MANUAL SECTION RETRACTED							MANUAL SECTION EXTENDED		MANUAL RETRACTED		MANUAL EXTENDED		
27			45		63		80		85		102		
LOAD RADIUS (FEET)	LOADED BOOM ANGLE △°	RATED LOAD POUNDS	LOADED BOOM ANGLE △°	RATED LOAD POUNDS	LOADED BOOM ANGLE △°	RATED LOAD POUNDS	LOADED BOOM ANGLE △°	RATED LOAD POUNDS	LOADED BOOM ANGLE △°	RATED LOAD POUNDS	LOADED BOOM ANGLE △°	RATED LOAD POUNDS	LOAD RADIUS (FEET)
10	58	36000	72	33000									10
12	52	32000	70	30000									12
15	43	26000	65	25500	74	22000	SEE WARNING NOTE 4		SEE WARNING NOTE 5		SEE WARNING NOTE 5		15
20	20	20000	58	20000	69	18000							20
25	—	—	50	13800	64	13800	71	13000	74	8600			25
30			40	9600	58	9600	67	11000	71	8000	75	7500	30
35	TELESCOPE CYLINDERS MUST BE FULLY RETRACTED AND AGAINST STOPS		27	6900	52	6900	63	8300	67	7500	72	6500	35
40					46	5700	58	6500	64	6500	69	5700	40
45					39	4300	54	5100	60	5600	66	4900	45
50					30	3300	49	4100	56	4800	63	4300	50
55					17	2500	43	3300	51	3900	59	3700	55
60							37	2700	46	3200	56	3200	60
65							30	2200	41	2600	52	2800	65
70							21	1700	35	2100	49	2400	70
74							2	1400	29	1700	45	2000	74
80											35	1300	80
85											29	1000	85
90											22	800	90

32U1577

BOOM RATI
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DEVICES. S

RATINGS
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MACHINE

4. FOR BOOM LENG
EXTENDED, THE
ONLY IN THE COL
NOT SHOWN USE
5. FOR BOOM LENG
AND LESS THAN
BOOM EXTENSIO
ONLY IN THE CO
BOOM RESPECTI
NEXT LOWER BO

"on rubber" . . . four section boom

rated crane loads in pounds — main boom — without outriggers

RATED LOADS FOR 16.00 x 24 — 16 PLY AND MICHELIN "XRB" TIRES				LOAD RADIUS (FEET)	RATED LOADS FOR 14.00 x 24 — 16 PLY TIRES			
STATIONARY		CREEP	2½ MPH		STATIONARY		CREEP	2½ MPH
± 6° ARC OVER FRONT	360° ARC	BOOM CENTERED OVER FRONT			± 6° ARC OVER FRONT	360° ARC	BOOM CENTERED OVER FRONT	

See back page for additional "On Rubber" charts

TO HELP PREVENT
RUBBER", IT IS RECO

1. MINIMUM BOOM L
2. OUTRIGGERS BE
GROUND.

WARNING: SEE AREAS OF
WARNING: WHEN TRANS
LEVEL SURFA
AND LOAD
RESTRAINED
KMPH) VEHICL
CREEP IS MOT

with manual section

ers fully extended and set

0° work areas

	WITH LATTICE EXTENSION				
ANUAL N EXTENDED	MANUAL RETRACTED		MANUAL EXTENDED		
80	85		102		
RATED LOAD POUNDS	LOADED BOOM ANGLE △°	RATED LOAD POUNDS	LOADED BOOM ANGLE △°	RATED LOAD POUNDS	LOAD RADIUS (FEET)
					10
					12
WARNING NOTE 4	SEE WARNING NOTE 5				15
					20
13000	74	8600	SEE WARNING NOTE 5		25
11000	71	8000	75	7500	30
8300	67	7500	72	6500	35
6500	64	6500	69	5700	40
5100	60	5600	66	4900	45
4100	56	4800	63	4300	50
3300	51	3900	59	3700	55
2700	46	3200	56	3200	60
2200	41	2600	52	2800	65
1700	35	2100	49	2400	70
1400	29	1700	45	2000	74
			35	1300	80
			29	1000	85
			22	800	90

32U1577

BOOM RATINGS MUST BE REDUCED BY WEIGHT OF BOOM ATTACHMENTS AND LOAD HANDLING DEVICES. SEE TABLE.

RATINGS ABOVE THE HEAVY LINE ARE BASED ON STRUCTURAL COMPETENCE AND NOT ON MACHINE STABILITY

WARNINGS

4. FOR BOOM LENGTHS LESS THAN 80 FEET WITH MANUAL SECTION EXTENDED, THE RATED LOADS ARE DETERMINED BY BOOM ANGLE ONLY IN THE COLUMN HEADED BY 80 FOOT BOOM. FOR BOOM ANGLES NOT SHOWN USE RATINGS OF NEXT LOWER BOOM ANGLE.
5. FOR BOOM LENGTHS LESS THAN 85 FEET WITH MANUAL RETRACTED AND LESS THAN 102 FEET WITH MANUAL EXTENDED, THE LATTICE BOOM EXTENSION RATED LOADS ARE DETERMINED BY BOOM ANGLE ONLY IN THE COLUMN HEADED BY 85 FOOT BOOM AND 102 FOOT BOOM RESPECTIVELY. FOR ANGLES NOT SHOWN USE RATING OF NEXT LOWER BOOM ANGLE.

oom

thout outriggers

ATED LOADS FOR x 24 — 16 PLY TIRES		
	CREEP	2½ MPH
0° RC	BOOM CENTERED OVER FRONT	
200	22400	17600
000	18900	14800
600	15100	11600
700	10000	7700
600	6200	5400
100	4000	3800
—	2600	2500
—	2200	2200
—	1400	1400
—	800	800

32Q1008

OAD AT RADIUS SHOWN N WILL OCCUR.

See back page for additional "On Rubber" charts

TO HELP PREVENT TIPPING CONDITIONS WHEN "LIFTING ON RUBBER", IT IS RECOMMENDED THAT —

1. MINIMUM BOOM LENGTHS BE USED.
2. OUTRIGGERS BE EXTENDED AS FAR AS POSSIBLE AND CLEAR OF GROUND.

WARNING: SEE AREAS OF OPERATION PLATE FOR WORKING RANGES.

WARNING: WHEN TRANSPORTING A LOAD MACHINE MUST BE ON FIRM, LEVEL SURFACE WITH MECHANICAL HOUSELOCK ENGAGED AND LOAD CENTERED OVER FRONT OF MACHINE AND RESTRAINED FROM SWINGING. DO NOT EXCEED 2½ MPH (4 KMPH) VEHICLE SPEED.

CREEP IS MOTION FOR LESS THAN 200 FT. IN A 30 MIN. PERIOD & NOT EXCEEDING 1 MPH.

STABILITY RATINGS DO NOT EXCEED 85% OF TIPPING LOADS WITH AUXILIARY SHEAVE ON BOOM POINT AND STOWED BOOM EXTENSION.

WARNING: "WITHOUT OUTRIGGER" LIFTS WITH JIB OR BOOM EXTENSION IN WORKING POSITION ARE PROHIBITED.

WARNING:

LOAD RATINGS WITHOUT OUTRIGGERS DEPEND ON TIRE CAPACITY AND CONDITION, INFLATED PER TABLE, AND APPLY ONLY WHEN REAR AXLE LOCKOUTS ARE ENGAGED.

TIRE INFLATION (PSI)				
SIZE	STAT.	CREEP	2½ MPH	ROADING
14:00x24	90	90	85	60
16:00x24	80	80	60	50
17:50x25	95	95	85	60
20:50x25	65	65	50	40

85					3
90					2
					2

32U15

"on rubber" . . . four section boom

rated crane loads in pounds — main boom — without outriggers

RATED LOADS FOR 16.00 x 24 — 16 PLY AND MICHELIN "XRB" TIRES				LOAD RADIUS (FEET)	RATED LOADS FOR 14.00 x 24 — 16 PLY TIRES			
STATIONARY		CREEP	2½ MPH		STATIONARY		CREEP	2½ MPH
± 6° ARC OVER FRONT	360° ARC	BOOM CENTERED OVER FRONT			± 6° ARC OVER FRONT	360° ARC	BOOM CENTERED OVER FRONT	
30000	18600	29400	19200	10①	26700	17200	22400	17600
25000	13000	25000	16200	12①	22600	13000	18900	14800
18800	8600	18800	12800	15①	18100	8600	15100	11600
10000	4700	10000	8600	20	10000	4700	10000	7700
6200	2600	6200	6200	25	6200	2600	6200	5400
4000	1100	4000	4000	30	4000	1100	4000	3800
2600	—	2600	2600	35	2600	—	2600	2500
2200	—	2200	2200	40	2200	—	2200	2200
1400	—	1400	1400	45	1400	—	1400	1400
800	—	800	800	50	800	—	800	800

32Q1012

32Q1008

①RATINGS LIMITED TO FULLY RETRACTED BOOM.

WARNING: DO NOT EXCEED RATED LOAD AT RADIUS SHOWN OR A TIPPING CONDITION WILL OCCUR.

"on rubber" . . . four section boom

rated crane loads in pounds — main boom — without outriggers

RATED LOADS FOR 20.50 x 25 — 16 PLY TIRES					RATED LOADS FOR 17.50 x 25 — 20 PLY TIRES			
STATIONARY		CREEP	2½ MPH		STATIONARY		CREEP	2½ MPH
‡ 6° ARC OVER FRONT	360° ARC	BOOM CENTERED OVER FRONT		LOAD RADIUS (FEET)	‡ 6° ARC OVER FRONT	360° ARC	BOOM CENTERED OVER FRONT	
29500	18600	24700	16100	10 ①	29500	18100	25000	18900
25000	13000	21000	13400	12 ①	25000	13000	21200	15900
18800	8600	16900	10500	15 ①	18800	8600	17100	12600
10000	4700	10000	6800	20	10000	4700	10000	8800
6200	2600	6200	4600	25	6200	2600	6200	6000
4000	1100	4000	3100	30	4000	1100	4000	4000
2600	—	2600	2000	35	2600	—	2600	2600
2200	—	2200	1800	40	2200	—	2200	2200
1400	—	1400	1100	45	1400	—	1400	1400
800	—	800	—	50	800	—	800	800

32Q1079

32Q1049

① RATINGS LIMITED TO FULLY RETRACTED BOOM.

WARNING: DO NOT EXCEED RATED LOAD AT RADIUS SHOWN OR A TIPPING CONDITION WILL OCCUR.

MEMBER PCSA

NOTE: All designs, specifications and components of the equipment described above are subject to change at the manufacturer's sole discretion at any time 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 the conditions encountered. The only warranty applicable is our standard written warranty for this machine. Manufactured and sold in conformance with U. S. Department of Commerce Commercial Standard CS-90-58.

Harnischfeger
P&H
milwaukee, wisconsin. 53201

Address inquiries to:

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14480 ALONDRA BLVD.
LA MIRADA, CALIF. 90638

(714) 521-6410 (213) 868-4754

D10-280 Litho in U.S.A.

Jib ratings

1. 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 JIB.
2. FOR BUCKET RATINGS ON JIB, DEDUCT 20% FROM MAXIMUM JIB LOAD RATINGS.
3. **WARNING:** DO NOT LIFT WITH JIB AT BOOM ANGLES BELOW 30°. LOSS OF STABILITY OCCURS RAPIDLY.

15' A-FRAME JIB			
MAXIMUM LOAD RATINGS IN POUNDS			
Minimum Boom Angle	JIB ANGLE OFFSET 0°	10°	20°
75°	7500	6500	5500
70°	6500	5500	5000
65°	5500	5000	4500
60°	4500	4000	3500
55°	3700	3500	3000
50°	3000	2750	2500
45°	2450	2200	2000
40°	1900	1750	1500
35°	1550	1400	1250
30°	1150	1100	1000