

# P&H<sup>®</sup> T-750

## 75-ton hydraulic truck crane 175-ft. maximum boom and jib



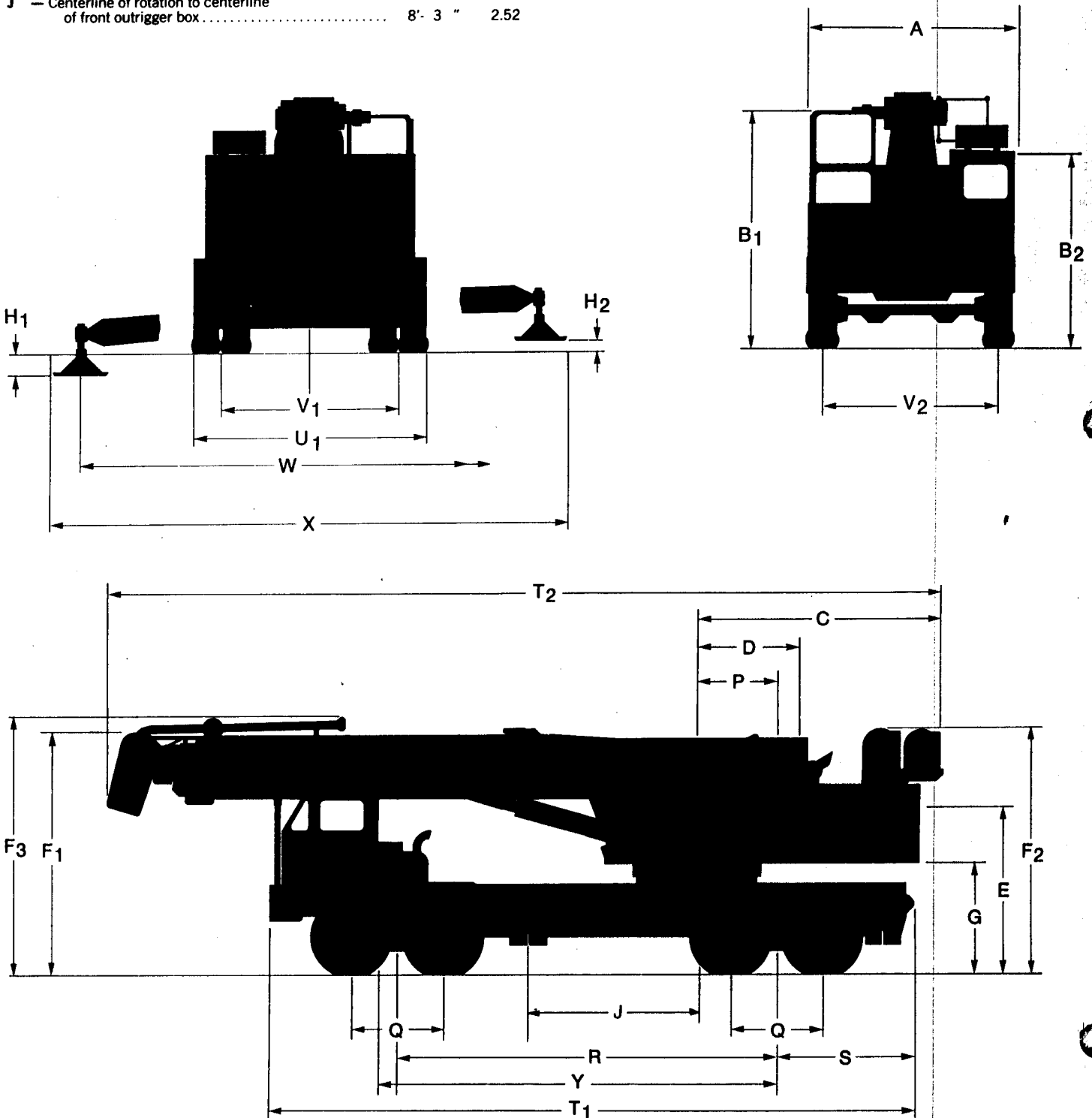
- Full-powered 33' to 105' telescopic boom . . . optional 30' lattice jib extendible to 70'; or optional 27' to 45' telescoping jib.
- Pressure compensated valves for more pressure control of winching, booming and telescoping.
- Boom tip lowers below horizontal for easy reeving or jib installation.
- Easier operation with combination hand lever/foot pedal control of boom hoist and boom telescope.
- Exclusive P&H Volu-Matik<sup>®</sup> Hydraulic System has ample power for every function.
- Loads can be telescoped within limits of chart.
- P&H 2-speed winches with controlled free-fall for faster load lowering.
- Powerful P&H 8x4 Carrier — road speeds to 45 mph (72 Kmph).
- P&H scissors-type hydraulic outriggers allow fast set-ups.

**Specifications**

# general dimensions

	Ft. & In.	Meters
A — Width of revolving superstructure .....	9'-11"	3.02
B <sub>1</sub> — Overall height (operator's cab) .....	11'- 1¼"	3.40
B <sub>2</sub> — Overall height (carrier cab) .....	9'- 1¼"	2.78
C — Swing clearance .....	11'-10"	3.61
D — Axis of rotation to boom foot pin .....	5'- 0"	1.52
E — Height of boom foot pin above grade .....	8'- 3"	2.51
F <sub>1</sub> — Max. height—boom head—travel position .....	11'-11"	3.63
F <sub>2</sub> — Max. height—winch—travel position .....	11'-11½"	3.65
F <sub>3</sub> — Max. height—lattice jib—travel position .....	12'- 7½"	3.85
G — Height, counterweight to grade .....	5'- 3"	1.60
H <sub>1</sub> — Wheel ground clearance outrigger cyls. ext. ....	0'-11¼"	.30
H <sub>2</sub> — Max. outrigger clearance .....	0'- 6½"	.17
J — Centerline of rotation to centerline of front outrigger box .....	8'- 3"	2.52

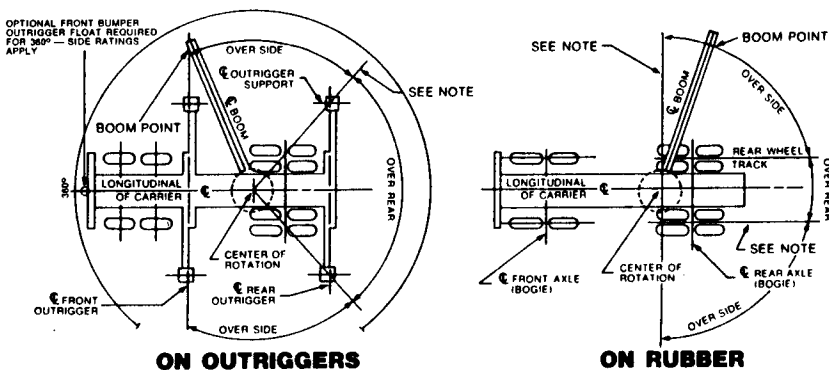
	Ft. & In.	Meters
P — Axis of rotation to center of rear bogie .....	3'-11¼"	1.21
Q — Between centers of axles .....	4'- 6"	1.37
R — Wheelbase—center of bogies .....	18'- 7¾"	5.68
S — Center of rear bogie to rear end of frame .....	6'-11½"	2.12
T <sub>1</sub> — Overall length of carrier .....	31'-11½"	9.74
T <sub>2</sub> — Overall length of machine (boom retracted) .....	40'-11"	12.47
U <sub>1</sub> — Max. overall width—outriggers retracted .....	11'- 0"	3.35
V <sub>1</sub> — Tread width—rear axle .....	8'- 4"	2.54
V <sub>2</sub> — Tread width—front axle .....	8'- 7½"	2.63
W — Length outriggers ext., at 11¼" below ground .....	21'- 8"	6.60
X — Max. overall width—over floats .....	24'- 6"	7.47
Y — Back of carrier cab to rear bogie (CA Dist.) .....	19'- 7¼"	5.98



# lifting capacities

LOAD RATINGS IN POUNDS													WITHOUT OUTRIGGERS				
Rad. in Ft.	Over Side and Over Rear With Outriggers												Over Side	Over Rear			
	Powered Boom Length — All Powered Sections Extended Equally																
	33 Feet		45 Feet		57 Feet		69 Feet		81 Feet		93 Feet				105 Feet		
	△	Lbs.	△	Lbs.	△	Lbs.	△	Lbs.	△	Lbs.	△	Lbs.			△	Lbs.	
12	60	150,000	69	90,000	75	83,000										40,000	50,000
15	54	120,000	65	86,000	71	80,000	75	74,000	75	*55,000						40,000	50,000
20	42	90,000	58	74,000	66	67,000	71	60,000	74	52,000	75	*40,000				24,500	32,000
25	25	66,000	50	62,000	60	56,000	66	50,000	71	44,000	74	38,000	75	*31,000		16,000	22,000
30			40	48,000	54	48,000	62	43,000	67	38,000	70	32,500	73	27,500		11,000	15,800
35			28	37,000	47	37,000	57	37,000	63	33,000	67	28,500	70	24,000		8,000	12,000
40					39	29,500	51	29,500	59	29,500	63	25,000	67	21,500		5,600	9,000
45					30	24,500	45	24,500	54	24,500	60	22,500	64	19,400		3,500	6,400
50							39	20,500	49	20,500	56	20,500	61	17,700		2,000	4,600
60									38	15,000	48	15,000	54	15,000		1,000	3,200
70												38	11,100	47	11,100		
80												25	8,000	38	8,000		
90														27	5,600		
100														1	4,200		

\*Load ratings, for maximum 75° boom elevation, will be at longer radius than indicated.



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

## AREAS OF OPERATION

Operating radius is the horizontal distance from the axis of rotation before loading, to the center of the vertical hoistline or tackle with loads applied. Boom angles shown are with rated loads applied and provide an approximation of the operating radius. For rated loads, do not exceed the specified operating radius. Crane load ratings are for machines with 12,000 pounds of counterweight and do not exceed 85% of the tipping loads. Ratings above the heavy line are based on the machine's hydraulic or structural competence and not on the machine stability. Weights of hooks, hook blocks, slings, and all other load handling devices, except the hoist rope, shall be considered a part of the load. Crane load ratings with outriggers are based on outriggers fully extended and set to a distance of 11 feet 0 inches from the longitudinal axis of the carrier to the outrigger float pivot connection and wheels within the boundary of the outriggers unloaded. Crane load ratings without outriggers depend on tire capacity and condition of tires inflated to 100 P.S.I.

Crane load ratings are based on freely suspended loads with the machine leveled and standing on a firm, uniform supporting surface. Practical working loads depend on supporting surface, wind, and other factors affecting stability, hazardous surroundings, experience of personnel and proper handling, all of which must be taken into account by the operator. Positioning or operation at radii and boom or jib lengths beyond the maximums and minimums shown, is not intended or approved. For boom lengths not shown, use load ratings of next longer boom. The maximum load which may be telescoped is limited by hydraulic pressure, boom angle and boom lubrication. All sections of the boom must be telescoped equally. For 33 foot boom length ratings, telescope cylinders must be fully retracted and against stops. Method of extension is independent or synchronous with each powered section extendible a distance of 24 feet.

HOIST REEVING												
P&H #16 — Rope Diameter — 3/4 In. Breaking Strength — 51,800 lbs.												
PERMISSIBLE LINE LOAD IN POUNDS												
Parts Line	1	2	3	4	5	6	7	8	9	10	11	12
P&H #16	12,500	25,000	37,500	50,000	62,500	75,000	87,500	100,000	112,500	125,000	137,500	150,000

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

MAXIMUM LATTICE JIB LOAD RATINGS IN POUNDS						
Min. Boom Angle	Jib Length In Feet					
	30	40	50	60	70	
0° OFF-SET	75°	14,000	12,500	11,000	9,500	8,000
	70°	11,500	10,000	9,000	8,000	7,000
	65°	9,500	8,000	7,000	6,000	5,400
	60°	8,000	6,000	5,000	4,500	3,800
7.5° OFF-SET	75°	12,500	11,000	9,500	8,000	6,500
	70°	11,000	9,000	8,000	7,000	5,800
	65°	9,000	7,000	6,000	5,300	4,700
	60°	7,500	5,500	4,500	4,000	3,300
15° OFF-SET	75°	11,000	9,500	8,000	6,500	5,000
	70°	9,500	8,000	7,000	6,000	4,500
	65°	8,000	6,500	5,500	4,600	3,800
	60°	7,000	5,000	4,200	3,500	2,800
	55°	5,700	3,600	2,800	2,300	2,000

NOTE: Below 55° Boom Angles Lifting With Jib Not Recommended.

With lattice jib in operating position powered boom ratings shall be reduced according to the jib length as shown in pounds.

Deductions apply when lifting from boom point with lattice jib erected. Use ratings in "105 feet" column and apply appropriate deduction. For boom lengths less than 105 feet, use boom angle to determine load rating in "105 feet" column. For boom angles not shown, use rating of next lower boom angle.

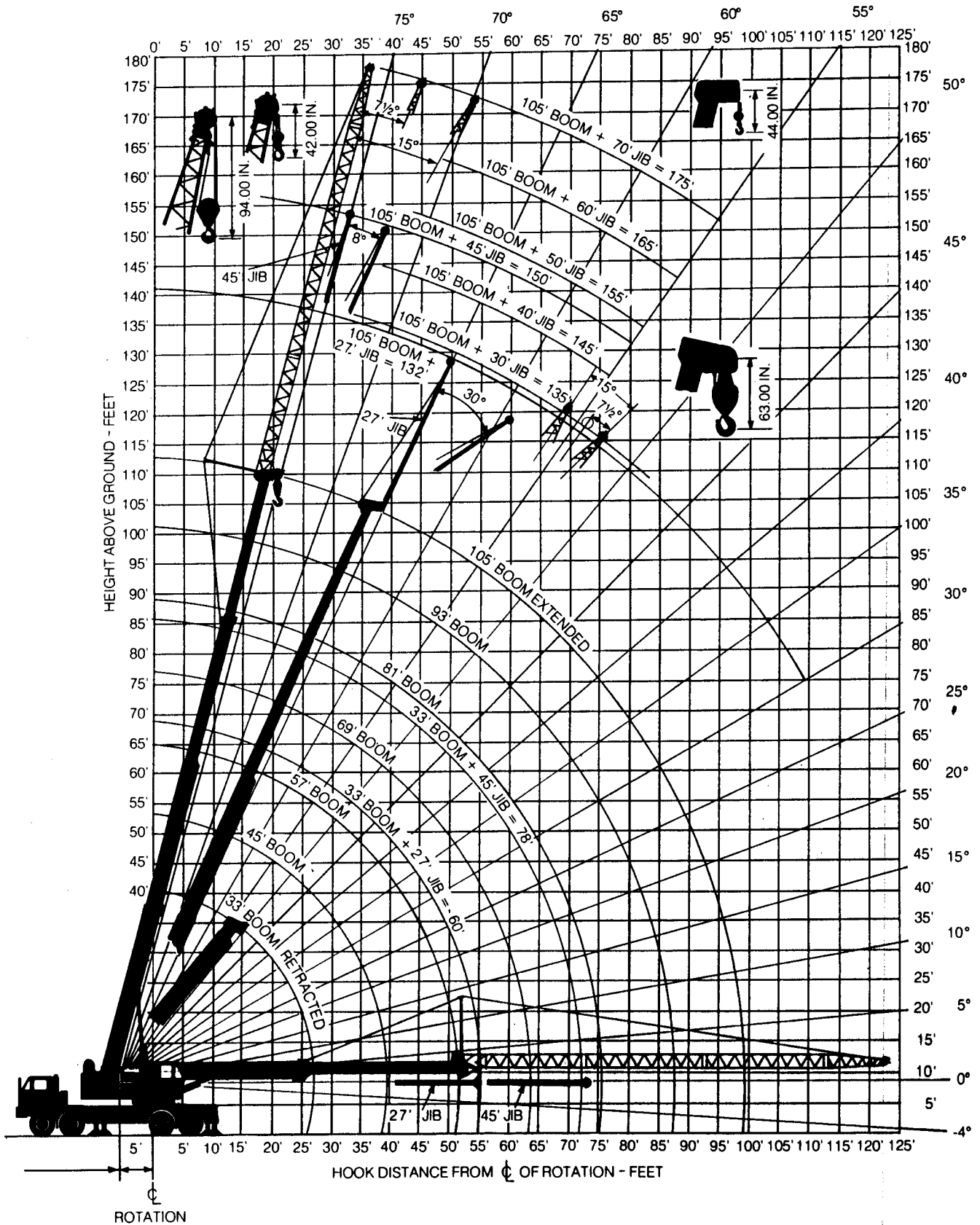
Jib Length	30 Ft.	40 Ft.	50 Ft.	60 Ft.	70 Ft.
Boom Deduct	2,000	2,600	3,200	3,800	4,400

Maximum jib load ratings are based on structural competence. Jib load ratings at any radius shall not exceed the powered boom load ratings at the same radius, and shall not exceed maximum jib load ratings shown. For bucket ratings on jib, deduct 20% from maximum jib load ratings. Maximum jib operating radius shall not exceed the operating radius of the powered boom for any given length setting. Use of the outriggers is recommended when boom is equipped with jib.

MAX. TELESCOPING JIB LOAD RATINGS IN POUNDS				
Min. Boom Angle	27 Foot Jib		45 Foot Jib	
	No Offset	30° Offset	No Offset	8° Offset
75°	10,000	5,200	5,000	3,800
73°	9,000	5,100	4,600	3,600
69°	8,000	4,950	4,000	3,250
66°	7,300	4,850	3,700	3,050
63°	6,800	4,750	3,450	2,900
60°	6,500	4,700	3,200	2,700
55°	6,000	4,550	2,900	2,500
50°	5,500	4,400	2,700	2,300
40°	5,000	4,150	2,500	2,100
30°	4,700	4,000	2,400	2,000

With telescoping jib in operating position, main hook ratings shall be reduced by 2,500 pounds.

# working ranges



# specifications

## UPPER MACHINERY



**BOOM (STANDARD):** 105'-0" (32 m) extended length, four piece, consisting of a boom base and three hydraulically extended and retracted sections. Six boom point sheaves with roller bearings. 33'-0" (10 m) retracted length.

**JIBS (OPTIONAL):** **LATTICE:** Basic 30'-0" (9.1 m) pin connected lattice jib consisting of 20'-0" (6.1 m) base section and 10'-0" (3.05 m) point section with single sheave, mast, and guy cables mounted on jib base. Jib storage on left hand side of boom base section. Extendible to 70'-0" (21.3 m) with optional 10'-0" (3.05 m) and 20'-0" (6.1 m) pin connected jib inserts. Optional storage brackets on carrier for transporting jib inserts. **TELESCOPING:** 27'-0" (8.2 m) to 45'-0" (13.7 m) telescoping jib with single point sheave. Storage on boom base section.

**AUXILIARY SHEAVE (OPTIONAL):** Single non-metallic sheave with bronze bushings, bracket-mounted on boom point, for use with single auxiliary winch line.

### HOOK BLOCKS (OPTIONAL):

75 TON: 6 sheaves with swivel hook and safety latch. (68 METRIC TON):

70 TON: 5 sheaves with swivel hook and safety latch. (63.5 METRIC TON):

20 TON: Single sheave with swivel hook and safety latch. (18 METRIC TON):

8.5 TON: Weighted hook with swivel and safety latch. (7.7 METRIC TON):

**CONTROLS:** Long hand levers for swing, main winch, boom hoist, and boom telescope with three lever individual cylinder positioning. Hand or foot operated boom hoist and pedal swing brake.

**SWING UNIT:** Hydraulic motor driving through double reduction gear case. 360 degree continuous rotation to 2.0 R.P.M.



**FASTENING TO LOWER:** Double row roller bearing swing circle with swing gear integral.

**SWING GEAR:** Internal spur gear 58" (1473 mm) P.D.

**SWING BRAKE:** Plate disc type spring applied brake with hand valve lock and metered foot control.



**MAIN WINCH:** P&H Model 16, two speed, mounted on the revolving frame. Planetary gearing for power raising and lowering. Infinitely variable control valve with spring loaded caliper disc brake and integral controlled free fall.

**DRUM:** Grooved 15" (381 mm) PD, 20" (508 mm) wide.

**CABLE:** 3/4" (19 mm) dia., 8 x 19 spin resistant with 7 x 7 I.W.R.C.

**DRUM CAPACITY:** 749 ft. (228 m) 6 layers.

**LINE PULL (MAX.):** 17,000# (7711 kg) 1st layer.

**LINE PULL (PERMISSIBLE):** 12,500# (5670 kg) per part of line.

**LINE SPEED (MAX.):** 530 F.P.M. (161 m/m) 6th layer.

**AUXILIARY WINCH (OPTIONAL):** P&H Model 16, same as main winch.



**BOOM HOIST:** Two 10 1/2" (267 mm) dia. cylinders — double acting hydraulic powered raising and lowering with holding valve.

**BOOM TELESCOPE:** Three 6 1/2" (165 mm) dia. cylinders — double acting hydraulic powered extending and retracting with holding valve.

**OPERATOR'S CAB:** All weather, full vision with safety glass. Contains all instrumentation and crane function controls. Includes: tachometer, gages for hydraulic oil temperature, engine fuel level, oil pressure, water temperature, voltmeter, ignition key solenoid start, service and emergency engine stop, dirty hydraulic filter element light, boom angle indicator, main drum turn indicator light, heater, electric remote control of outriggers, defroster, signal horn and windshield wiper.

**CAB EQUIPMENT (OPTIONAL):** Auxiliary winch drum turn indicator light, engine warning (low oil pressure, high water temperature), starting aid, seat belt, fire extinguisher, manual main drum turn indicator, manual auxiliary drum turn indicator, flood light assembly, dome light assembly, trouble light, radiator shutter assembly, positive (360°) swing lock, boom/swing by-pass valves.

**COUNTERWEIGHT:** 12,000 lbs. (5443 kg) power removable.



**POWER PLANT: Standard:** Detroit Diesel 6V53N, 187 H.P. at 2800 R.P.M., 431 lb. ft. (641.3 kg/m) max. torque at 1500 R.P.M., 6 cyl., 3 3/4" (98.4 mm) bore, 4 1/2" (114.3 mm) stroke, 318 cu. in. (5211 cm<sup>3</sup>) displacement.

**ELECTRICAL SYSTEM:** 12 volt negative ground, 200 amp. hr. battery, 62 amp. alternator.

**AIR CLEANER:** Farr Pamic Dry Type.

**FUEL TANK:** 92.5 gallons (348 liters)

**THROTTLE CONTROL:** Foot and positive position hand throttle.

## HYDRAULIC SYSTEM

**PUMP DRIVE (STANDARD):** Driven off upper engine, 1.6:1 reduction.

**PUMP DRIVE (OPTIONAL):** Pump drive with clutch disconnect.

**PUMPS:** Pump drive mounted dual inline gear pumps, motor pump 92 G.P.M. (348 L/m), cylinder pump 90 G.P.M. (341 L/m), engine driven brake pump 4 G.P.M. (15 L/m), total delivery 186 G.P.M. (704 L/m).

**OIL RESERVOIR:** 200 gal. (757) mounted on the upper. Sight level gage with full and low readout.

**OIL COOLER:** Oil to air round tube and fin type.

**CONTROL VALVES:** Pressure compensated, one three-section and one four-section valve bank.

**FILTERS:** Return line filters — 10 micron.

## CARRIER

**TYPE:** P&H 8 x 4.

**WEIGHT:** Including roller bearing swing circle, hydraulic outriggers, and 14:00 x 20 — 18 PR tires, 52,500 lbs. (23814 kg).

**FRAME:** Box section frame members of 100,000 PSI min. yield high strength steel between outrigger housings, heavy reinforced channel ahead of front outriggers, removable rear end frame section.



**OUTRIGGERS:** Hydraulic scissors type — eight double acting hydraulic cylinders for independent horizontal and vertical motion of each beam. Solenoid valve controlled. Manually operated cam locks.

**OUTRIGGER HOUSING:** Housing front and rear, pin connected and removable.

**OUTRIGGER BEAMS:** 100,000 PSI min. yield high strength steel box, full length reinforced, jack screw at beam ends. Extended position from center of carrier 11'-0" (3.3 m).



**POWER PLANT: Standard:** Detroit Diesel 6-71C, 238 H.P. at 2300 R.P.M., 610 lb. ft. (907.7 kg/m) max. torque at 1400 R.P.M., 6 cyl., 4 1/4" (108 mm) bore, 5" (127 mm) stroke, 426 cu.in. (6981 cm<sup>3</sup>) displacement.

**Optional:** Detroit Diesel 8V71C, 320 H.P. at 2300 R.P.M., 800 lb. ft. (1190.4 kg/m) max. torque at 1600 R.P.M., 8 cyl., 4 1/4" (108 mm) bore, 5" (127 mm) stroke, 568 cu.in. (9308 cm<sup>3</sup>) displacement.

## ELECTRICAL EQUIPMENT:

ENGINE	6-71C	8V71C
VOLTAGE	12V	12V
GROUND	Negative	Negative
ALTERNATOR	72AMP	72AMP
BATTERY	1-200 AMP	2-200 AMP

**AIR CLEANER:** Farr Pamic Dry Type

**FUEL TANK:** 75 gallons (282 liters) capacity.

**RADIATOR:** Vertical flat tube and fin type core. Thermostatic temperature controlled.

**CLUTCH:** Spicer 14" (355 mm) two plate.

**TRANSMISSIONS:** **Standard Main:** Fuller Model T0905C, five speeds forward, one reverse. **Optional Main with Detroit Diesel 8V71:** Allison Model HT740D automatic, four speeds forward, one reverse. **Standard Auxiliary:** Spicer Model 8341D, four speed. **Optional with Allison Main Transmission:** Spicer Model 8031R, three speed.

**PERFORMANCE**

ENGINE	6-71C	8V71C	8V71C
		w/Fuller	w/Allison
LOW GEAR	2 MPH	2 MPH	2 MPH
HIGH GEAR	36 MPH	45 MPH	42 MPH
MAX. GRADE	28.3%	38.6%	45%

**ENGINE BRAKE:** Jacobs brake std.

**SERVICE BRAKES:** Bendix Westinghouse front, maxi brakes rear. Air on all eight wheels — shoe type.

**PARKING BRAKES:** Maxi-spring set, air release on rear wheels.

**FRONT AXLE:** Shuler Model FTCS-34L



**REAR AXLE:** Rockwell Model PR 250 planetary axle. Single reduction 10.1:1 ratio with interaxle differential.

**SUSPENSION:** Solid bogie mounted with torque rods front and rear.



**STEERING:** Garrison dual hydraulic steering with Ross steering gear, 21" (533 mm) dia. steering wheel.

**TIRES:** 14:00 x 20 — 18 PR tube type — non-directional. On-off highway tires available.

**CAB:** One man type, steel with safety glass, offset left side of engine.

**CAB EQUIPMENT:** Contains all loading controls and instrumentation. Includes illuminated instrument panel with speedometer, voltmeter, air pressure gage, low air pressure indicator light, fuel gage, oil pressure gage, water temperature gage, air horns, electric windshield wiper, heater and defroster.

**CAB EQUIPMENT (OPTIONAL):** Engine warning (low oil pressure, high water temperature), windshield washer, hour meter, right and left hand West Coast mirror.

**LIGHTS:** Dual headlights, tail lights, stop lights, front and rear directional signals with emergency flasher, rear license plate light, front, rear, and side clearance lights, and dome light.

**EQUIPMENT (STANDARD):** Front bumper, full fenders, skirts, frame decking with anti-skid surface and hood, rigging compartment, front towing hooks and carrier mounted boom rack.

**EQUIPMENT (OPTIONAL):** Back up warning device, spare wheel, front bumper counterweight, front fifth float, 125 gal. (470 liter) siphon proof fuel tank, manual or electric air tank condensation valve, anti-two block device, on-off highway tires.

**VEHICLE WEIGHTS:** Includes standard engines, 105' (32 m) boom, Model 16 main and Model 16 aux. winches, counterweight, and hook block.

	FRONT AXLE	REAR AXLE	G.V.W.
	35,981 (15960 kg)	78,765 (35738 kg)	113,950 (51688 kg)
Effect on axle loads by removing these items.			
Hook Block (70 Ton)	-1,680 (762 kg)	+705 (320 kg)	-975 (442 kg)
Model 16 aux. winch	+697 (316 kg)	-2,497 (1133 kg)	-1,800 (817 kg)
Counterweight	+4,076 (1849 kg)	-16,076 (7292 kg)	-12,000 (5443 kg)
Effect on axle loads by adding these items.			
Front bumper counterweight	+22,212 (10075 kg)	-8,212 (3725 kg)	+14,000 (6350 kg)
30 Ft. (9.1 m) lattice jib, stored	+1,796 (815 kg)	-46 (21 kg)	+1,750 (794 kg)
10 Ft. (3.05 m) insert (stored rear)	+213 (96 kg)	+92 (42 kg)	+305 (138 kg)
10 Ft. (3.05 m) insert (stored front)	+241 (109 kg)	+39 (18 kg)	+280 (127 kg)
20 Ft. (6.1 m) insert or two 10 ft. pinned inserts, stored	+570 (259 kg)	+75 (34 kg)	+495 (225 kg)
27 to 45 Ft. (8.2 to 13.7 m) telescoping jib	+2310 (1048 kg)	+40 (18 kg)	+2350 (1066 kg)
Detroit Diesel 8V71C std. transmission	+195 (88 kg)	0	+195 (88 kg)
Detroit Diesel 8V71C w/Allison auto. transmission	+540 (245 kg)	0	+540 (245 kg)



**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.

Address inquiries to:

**Harnischfeger**

**P&H**

Milwaukee, Wisconsin 53201

ORIGINAL  
Do Not REMOVE

# P&H

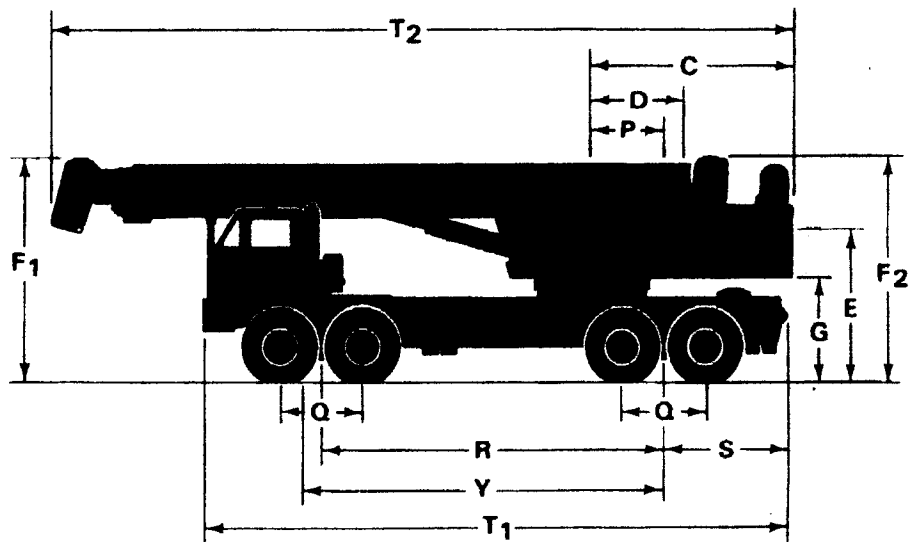
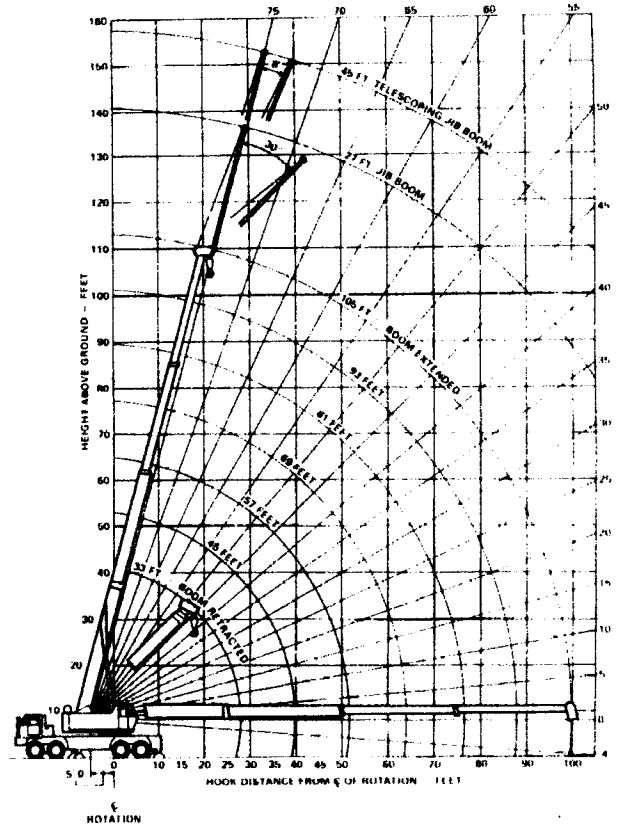
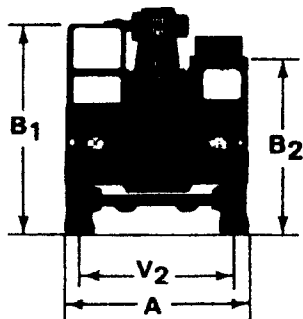
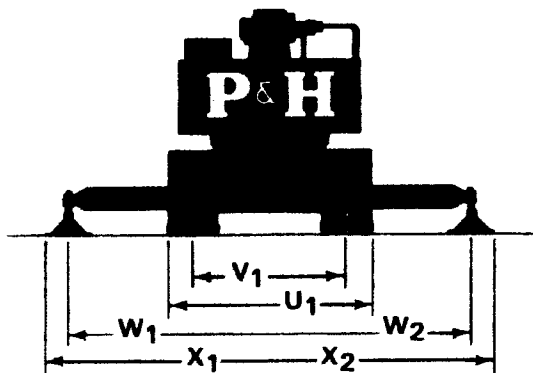
## 75-TON FULLY HYDRAULIC TRUCK CRANE



**HIGH  
PERFORMANCE  
DESIGN  
FOR GREATER  
PROFITABILITY**

- High torque P&H winches
- New 4-section all-hydraulic telescoping boom
- 45' telescoping jib for 150' maximum reach
- Full 75-ton usable capacity
- Low overall height—under 12'
- Exclusive P&H Outriggers with independent horizontal and vertical motions . . . 22' spread
- Powerful Harnischfeger-built carrier
- Controlled free-fall for faster load lowering
- Three lever synchronized telescoping
- Boom tip lowers for easy reeving or jib installation
- Exclusive P&H Volu-Matik® Hydraulic System

# PUTS THE BOOM POINT WHERE THE ACTION IS . . . INSTANTLY!



- |                      |  |             |                      |   |             |
|----------------------|--|-------------|----------------------|---|-------------|
| <b>A</b>             | Width of Revolving Superstructure        | 9'-9-1/2"   | <b>S</b>             | Center of Rear Bogie to Rear End of Frame   | 6'-11-1/2"  |
| <b>B<sub>1</sub></b> | Overall Height (Operator's Cab)          | 11'-1-3/4"  | <b>T<sub>1</sub></b> | Overall Length of Carrier                   | 31'-11-1/4" |
| <b>B<sub>2</sub></b> | Overall Height (Carrier Cab)             | 9'-1-1/4"   | <b>T<sub>2</sub></b> | Overall Length of Machine (Boom Retracted)  | 40'-2-1/4"  |
| <b>C</b>             | Swing Clearance                          | 11'-1"      | <b>U<sub>1</sub></b> | Max. Overall Width—Outriggers Retracted     | 11' 0"      |
| <b>D</b>             | Axis of Rotation to Boom Foot Pin        | 5'-0"       | <b>V<sub>1</sub></b> | Tread Width—Rear Axle                       | 8'-4"       |
| <b>E</b>             | Height of Boom Foot Pin above Grade      | 8'-3"       | <b>V<sub>2</sub></b> | Tread Width—Front Axle                      | 8'-3-1/2"   |
| <b>F<sub>1</sub></b> | Max. Height—Boom Head—Travel Position    | 11'-11"     | <b>W<sub>1</sub></b> | Length Outriggers Extended—Ground Level     | 21'-11-1/2" |
| <b>F<sub>2</sub></b> | Max. Height—Winch—Travel Position        | 11'-11-1/2" | <b>W<sub>2</sub></b> | Max. Length, Outriggers Extended            | 22'-0"      |
| <b>G</b>             | Height, Counterweight to Grade           | 5'-3"       | <b>X<sub>1</sub></b> | Overall Width—Over Floats—Ground Level      | 24'-5-1/2"  |
| <b>P</b>             | Axis of Rotation to Center of Rear Bogie | 3'-11-3/4"  | <b>X<sub>2</sub></b> | Max. Overall Width—Over Floats              | 24'-6"      |
| <b>Q</b>             | Between Centers of Axles                 | 4'-6"       | <b>Y</b>             | Back of Carrier Cab to Rear Bogie (CA Dist) | 19'-7 1/4"  |
| <b>R</b>             | Wheelbase—Center of Bogies               | 18'-7 3/4"  |                      |   |             |



# SPECIFICATIONS

## UPPER MACHINERY

**ENGINE:** GM6V53N Diesel, 6 blade 24" blower fan, tachometer-hourmeter mounted in operator's cab, foot and positive position hand throttle, 187 H.P. at 2800 R.P.M.

**ELECTRICAL SYSTEM:** 12 Volt — 62 AMP Alternator and Starter.

**AIR CLEANER:** Farr — Pamic dry type.

**PUMP DRIVE:** Single spur gear, 1.60/1 reduction.

**FUEL TANK:** 92½ gallons.

**HYDRAULIC PUMPS:** Pump drive mounted, dual, inline gear pumps, 105 and 92 GPM engine mounted, 8 GPM winch brake pump — Suction line shut off valves.

**HYDRAULIC TANK:** 200 gallon capacity — Pressurized, baffled, diffuser system — Full flow filtration with dirty element signal for remote indication. Removable, magnetic bayonet — Sight level gage with full and low readout.

**OIL COOLER:** Mounted in front of engine radiator with partial oil flow.

**CONTROL VALVES:** Pressure compensated, one three and one four stack.

**CONTROLS:** Long hand levers to control swing, main winch and boom hoist with synchronized boom telescope and three lever individual cylinder repositioning — Winch brake release valve operated by forward motion of winch lever — Boom hoist, hand or foot operated — Winch drum turn indicator on winch lever.

**SWING REDUCER:** Staggered gear swing motor driving through double reduction spur gearing to output swing pinion for 360° rotation and swing speed of 2 R.P.M.

**SWING BRAKE:** Disc type, spring applied brake with hand valve and adjustable glide foot control.

**SWING CIRCLE®:** Double row roller bearing with integral swing gear

**MAIN WINCH:** P&H No. 16 winch, mounted on boom base section. Planetary gearing for equal speed power raising and lowering — Infinitely variable control valve with spring loaded caliper disc brake and integral free fall operated by forward motion of winch lever — Grooved 15" dia. drum — 20" long, 23 5/8" dia. flanges — Line speed, 3rd wrap — 240 FPM — Available line pull — 3rd wrap 13,000 pounds — Permissible line pull — 13,000 pounds — 3/4" — 8 x 19 spin resistant cable 500 ft.

**AUXILIARY WINCH:** P&H No. 10, Optional. Planetary gearing with spring loaded caliper disc brakes — Infinitely variable control valve with integral controlled free fall operated by forward motion of winch lever — Grooved 10" dia. drum, 14" long 18" dia. flanges — Line speed, 3rd wrap, 240 FPM — Available line pull, 3rd wrap, 8330 pounds — Permissible line pull, 6666 pounds — 1/2", 8 x 19 spin resistant cable, 300 feet.

**COUNTERWEIGHT:** 12,000 pound casting, power removable with optional auxiliary winch.

**OPERATOR'S CAB:** All weather full vision with safety glass — Tachometer hydraulic oil temperature gauge — Gage cluster including fuel, oil, pressure, ammeter, and water temperature gauges — Boom angle indicator and main drum turn indicator — Electric, remote control of outriggers — Ignition key, solenoid start — Service and emergency engine stop — Dirty hydraulic filter element light.

**BOOM:** Four section, three sections power telescoping, high strength steel — Four plate, rectangular with double corner welds — Ultra-high molecular weight non-metallic slider pads with self-stored adjustment shims — Length fully retracted—33'0" — Length fully extended—105'0" — Six, 18" O.D. x 16½ P.D. boom point sheaves.

**BOOM HOIST:** Raise and lower speeds equal—45 sec. — Individual lockouts with thermal protection on each cylinder — Self-aligning bearings on cyl. ends.

**TELESCOPE:** Extend and retract speeds equal—120 seconds — Integral lock valves with thermal protection.

**BOOM RACK:** Mounted on front of carrier to prevent upper swinging when traveling.

**OPTIONS:** 11½" dia. engine clutch disconnect — Auxiliary winch drum turn indicator — Signal horn (upper) — Windshield wiper — Defroster — Hook block, 75 ton, 6 sheave with swivel hook and safety latch — Hook block, 70 ton, 5 sheave with swivel hook and safety latch — Jib hook block, 8.5 ton weighted ball hook with or without swivel safety latch — Jib, 27 ft., telescopic to 45 ft. — Jib, 27 ft. — Jib, 5 ft. — Jib, single sheave boom point extension (for extra line over boom point).

## CARRIER — (8 x 4)

**MAKE:** P&H — 75 Ton Capacity.

**WEIGHT:** Including roller bearing swing circle rim, Hydraulic outriggers with 14:00 x 20 — 18 ply tires 53,500#

**FRAME:** Box section frame members of T-1 steel between outrigger housings. Heavy reinforced channel ahead of front outriggers (removable rear end frame section — standard).

**OUTRIGGERS:** P&H Hydraulic Scissors Type — 8 double acting Hydraulic cylinders for independent horizontal and vertical motion of each beam — solenoid valve controlled — standard.

**HOUSINGS:** Two independent housings front and rear, pin connected and removable — standard.

**BEAMS:** T-1 steel box, full length reinforced, jack screw at beam Ends extended position from center of carrier — 11'0"

**POWER PLANT:**  
Diesel: GM6-71N, 6 cyl. 228 H.P. @ 2100 R.P.M. Standard, Cummins NHF265, 6 cyl. 258 H.P. @ 2100 R.P.M. (Optional) GMBV71N, 8 cyl. 318 H.P. @ 2300 R.P.M. (Optional).

**CLUTCH:** Spicer 2-plate angle spring type.

**TRANSMISSION:** Main — Spicer 8553A, 5 speed forward, 1 reverse. Auxiliary — Spicer 8341D, 4 speed, Allison HT740D automatic, with Spicer 8031C Auxiliary, optional for GMBV71N.

**BRAKES — SERVICE:** Bendix Westinghouse front, Maxi Brakes rear Air on all eight wheels — Shoe type 1292 sq. in.

**FRONT AXLES:** Shuler Model FTCS-34L.

**REAR AXLE UNIT:** Timken Detroit Model SPR250 Planetary Axle. Single reduction at axle center and planetary drive at wheel hub to four sets of dual wheels with inter-axle differential.

**SUSPENSION:** Solid bogie mounted with torque rods — Front and rear.  
**STEERING:** Garrison dual Hydraulic steering with Ross TE72671 steering gear. Steering wheel diameter 21".

**RADIATOR:** Vertical flat tube and fin type core, thermostatic temperature control.

**COOLING SYSTEM CAPACITY:** ..... 69 Qts.

**FUEL TANK CAPACITY:** 75 Gal. (Siphon proof tank, optional extra)

**TIRES:** Twelve 14:00 x 20' — 18 ply (Standard).

**CAB:** Steel — one man type — offset left side of engine Safety glass

**LIGHTS:** Dual headlights, tail lights, stop lights, directional signal lights front and rear, license plate lights, clearance lights on outrigger boxes and truck cab. (Clearance lights also furnished on crane cab). Reflectors on front and rear. All rear lights recessed in frame, also license plate bracket. 12 Volt electrical system.

**EQUIPMENT:** Front bumper, full fenders, skirts, running boards, hood, rigging compartment, frame decking, Bostrom seat, 12 Volt battery, horn, rear view mirror, air tank with hose extension and tire inflating valve, illuminated instrument panel, with speedometer ammeter, air pressure gauge, fuel gauge, oil pressure gauge, water temperature indicator, low pressure indicator light, tachometer towing hooks front only, dash mounted air brake valve, tools and accessories and a set of four aluminum floats

## PERFORMANCE

(Based on GM6-71N Full Load Speed

G.V. Weight 115,000 Lbs. (With Outriggers)

CONDITION AT FULL LOAD	SPEED RANGES	% OF GRADE
On Highway*	4.0 to 44.5 mph	13.9 — 0.1%
Off Highway†	2.2 to 16.3 mph	25.5 — 1.2%

\*Auxiliary Transmission in High Range.

†Auxiliary Transmission in Low Range.

## VEHICLE WEIGHTS (APPROXIMATE)

	Front	Rear	GVW
Standard machine w/12,000# cwt. main and aux. winch, jib, hook block. (P&H Winches)	38,000	77,000	115,000
Without Counterweight	+4,000	-16,000	-12,000
Without Hook Block	-1,700	+700	-1,000
Without Jib	-2,300	-50	-2,350
Without Rear Outrigger Beams	+1,100	-4,900	-3,800
Without Front Outrigger Beams	-2,500	-1,300	-3,800



NOTE: In furtherance of our policy of continual product improvement, all designs and specifications are subject to change 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.

For more information, write Harnischfeger, Milwaukee, Wis. 53246 or call:



WILLIG EQUIPMENT BRANCH OF CLARK EQUIPMENT COMPANY  
14480 ALONDRA BOULEVARD, LA MIRADA, CALIFORNIA 90638

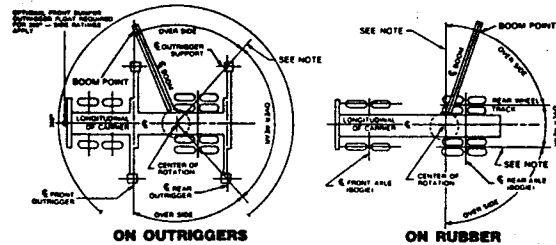
**Harnischfeger**



# lifting capacities

Rad. in Ft.	LOAD RATINGS IN POUNDS								WITHOUT OUTRIGGERS			
	Over Side and Over Rear With Outriggers								Over Side	Over Rear		
	Powered Boom Length — All Powered Sections Extended Equally											
	33 Feet	45 Feet	57 Feet	69 Feet	81 Feet	93 Feet	105 Feet					
	△ Lbs.	△ Lbs.	△ Lbs.	△ Lbs.	△ Lbs.	△ Lbs.	△ Lbs.					
12	60	150,000	69	90,000	75	83,000			40,000	50,000		
15	54	120,000	65	86,000	71	80,000	75	74,000	75	55,000		
20	42	90,000	58	74,000	66	67,000	71	60,000	74	52,000		
25	25	66,000	50	62,000	60	56,000	66	50,000	71	44,000		
30			40	48,000	54	48,000	62	43,000	67	38,000		
35			28	37,000	47	37,000	57	37,000	63	33,000		
40					39	29,500	51	29,500	59	29,500		
45					30	24,500	45	24,500	54	24,500		
50							39	20,500	49	20,500		
60								38	15,000	48	15,000	
70									38	11,100	47	11,100
80									25	8,000	38	8,000
90										27	5,600	
100										1	4,200	

\*Load ratings, for maximum 75° boom elevation, will be at longer radius than indicated.



## AREAS OF OPERATION

Operating radius is the horizontal distance from the axis of rotation before loading, to the center of the vertical hoistline or tackle with loads applied. Boom angles shown are with rated loads applied and provide an approximation of the operating radius. For rated loads, do not exceed the specified operating radius. Crane load ratings are for machines with 12,000 pounds of counterweight and do not exceed 85% of the tipping loads. Ratings above the heavy line are based on the machine's hydraulic or structural competence and not on the machine stability. Weights of hooks, hook blocks, slings, and all other load handling devices, except the hoist rope, shall be considered a part of the load. Crane load ratings with outriggers are based on outriggers fully extended and set to a distance of 11 feet 0 inches from the longitudinal axis of the carrier to the outrigger float pivot connection and wheels within the boundary of the outriggers unloaded. Crane load ratings without outriggers depend on tire capacity and condition of tires inflated to 100 P.S.I.

Crane load ratings are based on freely suspended loads with the machine leveled and standing on a firm, uniform supporting surface. Practical working loads depend on supporting surface, wind, and other factors affecting stability. Hazardous surroundings, experience of operator and proper handling, all of which must be taken into account by the operator. Positioning or operation at radii and boom or jib lengths beyond the maximums and minimums shown, is not intended or approved. For boom lengths not shown, use load ratings of next longer boom. The maximum load which may be telescoped is limited by hydraulic pressure, boom angle and boom lubrication. All sections of the boom must be telescoped equally. For 33 foot boom length ratings, telescope cylinders must be fully retracted and against stops. Method of extension is independent of synchronous with each powered section extendible a distance of 24 feet.

HOIST REEVING												
P&H #16 — Repe Diameter — 3/4 in. Breaking Strength — 51,800 lbs.												
PERMISSIBLE LINE LOAD IN POUNDS												
Parts Line	1	2	3	4	5	6	7	8	9	10	11	12
P&H #16	12,500	25,000	37,500	50,000	62,500	75,000	87,500	100,000	112,500	125,000	137,500	150,000

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

# working ranges

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Min. Boom Angle	Jib Length In Feet					
	30	40	50	60	70	
75°	14,000	12,500	11,000	9,500	8,000	6,000
70°	11,500	10,000	9,000	8,000	7,000	
65°	9,500	8,000	7,000	6,000	5,400	
60°	8,000	6,000	5,000	4,500	3,800	
55°	6,500	4,500	3,800	3,100	2,600	

7 1/2° OFF-SET	Jib Length In Feet					
	30	40	50	60	70	
75°	12,500	11,000	9,500	8,000	6,500	
70°	11,000	9,000	8,000	7,000	5,800	
65°	9,000	7,000	6,000	5,300	4,700	
60°	7,500	5,500	4,500	4,000	3,300	
55°	6,000	4,000	3,200	2,700	2,300	

1 1/2° OFF-SET	Jib Length In Feet					
	30 FL	40 FL	50 FL	60 FL	70 FL	
75°	11,000	9,500	8,000	6,500	5,000	
70°	9,500	8,000	7,000	6,000	4,900	
65°	8,000	6,500	5,500	4,600	3,800	
60°	7,000	5,000	4,200	3,500	2,800	
55°	5,700	3,600	2,800	2,300	2,000	

NOTE: Below 53° Boom Angles Lifting With Jib Not Recommended.

With lattice jib in operating position powered boom ratings shall be reduced according to the jib length as shown in pounds.

Deductions apply when lifting from boom point with lattice jib erected. Use ratings in "105 feet" column and apply appropriate deduction. For boom lengths less than 105 feet, use boom angle to determine load rating in "105 feet" column. For boom angles not shown, use rating of next lower boom angle.

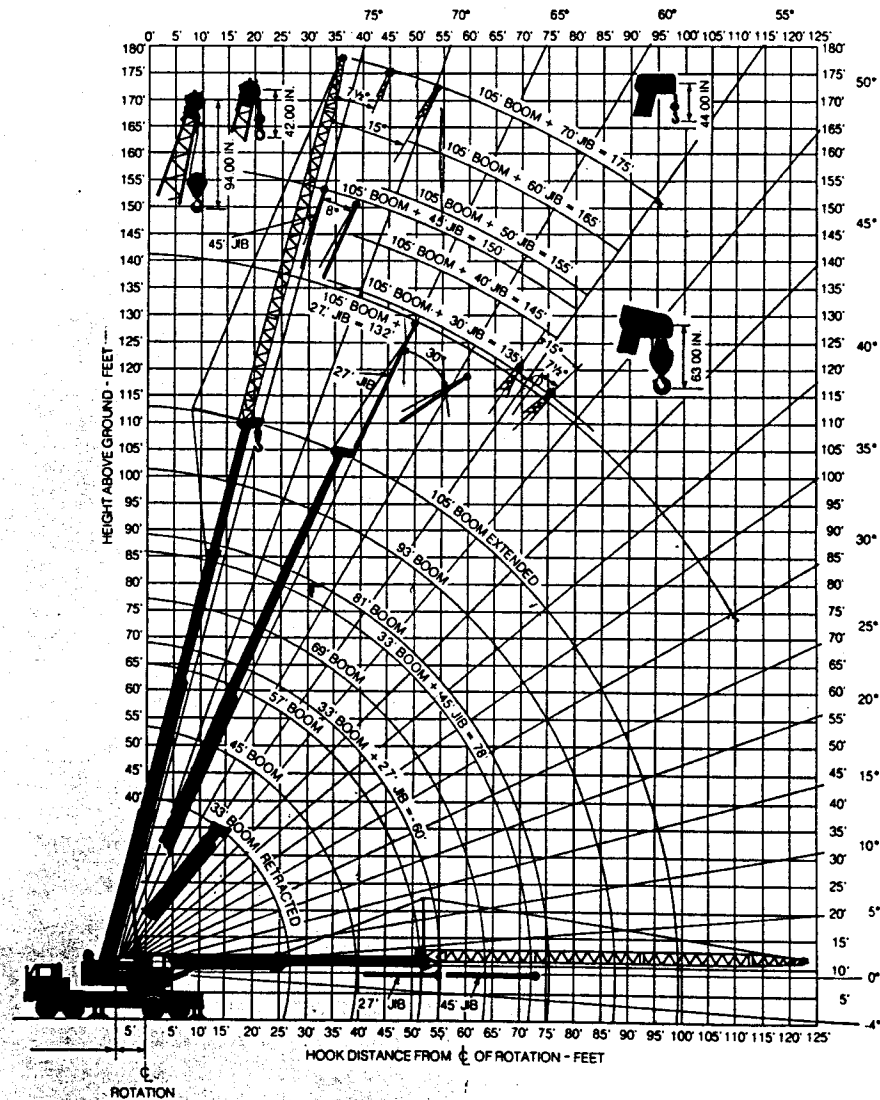
Jib Length	30 FL	40 FL	50 FL	60 FL	70 FL
Boom Deduct	2,000	2,600	3,200	3,800	4,400

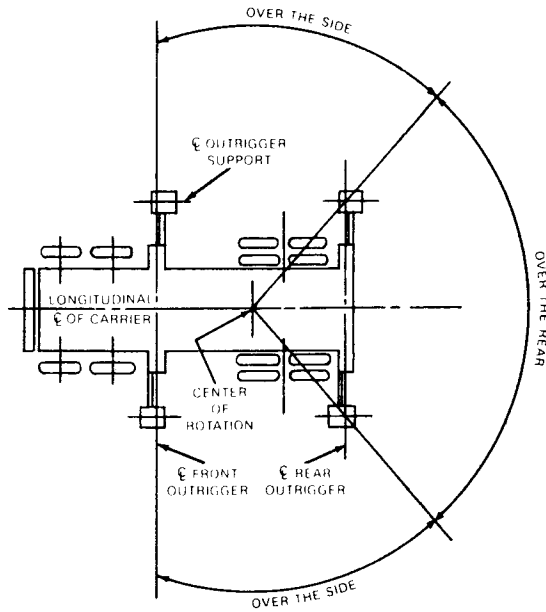
Maximum jib load ratings are based on structural competence. Jib load ratings at any radius shall not exceed the powered boom load ratings at the same radius, and shall not exceed maximum jib load ratings shown. For bucket ratings on jib, deduct 20% from maximum jib load ratings. Maximum jib operating radius shall not exceed the operating radius of the powered boom for any given length setting. Use of the outriggers is recommended when boom is equipped with jib.

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Min. Boom Angle	MAX. TELESCOPING JIB LOAD RATINGS IN POUNDS			
	27 Foot Jib	No Offset		45 Foot Jib
75°	10,000	5,200	5,000	3,800
73°	9,000	5,100	4,600	3,600
69°	8,000	4,950	4,000	3,250
66°	7,300	4,850	3,700	3,050
63°	6,900	4,750	3,450	2,900
60°	6,500	4,700	3,200	2,700
55°	6,000	4,550	2,900	2,500
50°	5,500	4,400	2,700	2,300
40°	5,000	4,150	2,500	2,100
30°	4,700	4,000	2,400	2,000

With telescoping jib in operating position, male hook ratings shall be reduced by 2,500 pounds.





### QUADRANT OF OPERATION

STD. 85% LOAD RATING CHART OPERATING SECTORS

# T-750

PCSA CLASS 12-295



RATED LIFTING CAPACITY IN POUNDS									
MAIN BOOM LOAD RATINGS — CAPACITY IN POUNDS									
Operating Radius In Feet	Over Side & Over Rear With Outriggers							Without Outriggers	
	Boom Length in Feet							Over Side	Over Rear
	33	45	57	69	81	93	105		
12	150,000	90,000	83,000					40,000	50,000
15	120,000	86,000	80,000	74,000	65,000			40,000	50,000
20	90,000	74,000	67,000	60,000	52,000	45,000		24,500	32,000
25	66,000	62,000	56,000	50,000	44,000	38,000	32,000	16,000	22,000
30		48,000	48,000	43,000	38,000	32,500	27,500	11,000	15,800
35		37,000	37,000	37,000	33,000	28,500	24,000	8,000	12,000
40			29,500	29,500	29,500	25,000	21,500	5,600	9,000
45			24,500	24,500	24,500	22,500	19,400	3,500	6,400
50				20,500	20,500	20,500	17,700	2,000	4,600
60					15,000	15,000	15,000	1,000	3,200
70						11,100	11,100		
80						8,000	8,000		
90							5,600		
100							4,200		

MAXIMUM JIB LOAD RATINGS IN POUNDS				
Minimum Boom Angle	27 FOOT JIB		45 FOOT JIB	
	No Offset	30° Offset	No Offset	8° Offset
75°	10,000	5,200	5,000	3,800
73°	9,000	5,100	4,600	3,600
69°	8,000	4,950	4,000	3,250
66°	7,300	4,850	3,700	3,050
63°	6,800	4,750	3,450	2,900
60°	6,500	4,700	3,200	2,700
55°	6,000	4,550	2,900	2,500
50°	5,500	4,400	2,700	2,300
40°	5,000	4,150	2,500	2,100
30°	4,700	4,000	2,400	2,000

Maximum jib rating is based on structural competence. Jib ratings at any radius shall not exceed the main boom ratings for the same radius and shall not exceed maximum jib ratings shown. For bucket ratings on jib deduct 20% from jib ratings. Maximum jib operating radius is not to exceed the operating radius of main boom for any given length setting. Use of outriggers is recommended when boom is equipped with jib.

Operating radius is the horizontal distance from the axis of rotation before loading, to the center of the vertical hoist line or tackle with loads applied. Crane load ratings are for machines with 12,000 pounds of counterweight and do not exceed 85% of tipping loads. Ratings above the heavy line are based on the machine's hydraulic or structural competence and not on the machine stability. Weights of hooks, hook blocks, slings, and all other load handling devices, except the hoist rope, shall be considered a part of the load. Ratings with outriggers are based on outriggers extended and set to a distance of 22 ft.—0 in. from the longitudinal axis of the carrier to the outrigger float pivot connection and wheels within the boundary of the outriggers unloaded. Crane load ratings without outriggers depend on tire capacity and condition of tires inflated to 100 P.S.I. With jib in operating position, main boom load ratings shall be reduced by 2,500 pounds. Crane load ratings are based on freely suspended loads with the machine leveled and standing on a firm, uniform, supporting surface. Practical working loads depend on supporting surface, wind, and other factors affecting stability, hazardous surroundings, experience of personnel and proper handling, all of which must be taken into account by the operator. Positioning or operation at radii and boom or jib lengths beyond the maximums and minimums shown, is not intended or approved. For boom lengths not shown, use load ratings of next longer boom. Do not exceed 60 foot radius without the use of outriggers. The maximum load which may be telescoped is limited by hydraulic pressure, boom lubrication etc. All sections of the boom must be telescoped equally. For 33 foot boom length ratings, telescope cylinders must be fully retracted and against stops.

**NOTE: Operation of this equipment in excess of rated loads and disregard of instructions voids the warranty.**

HOIST REEVING — PARTS OF LINE — MAXIMUM LOAD IN POUNDS												
Winch	1	2	3	4	5	6	7	8	9	10	11	12
Main	12,500	25,000	37,500	50,000	62,500	75,000	87,500	100,000	112,500	125,000	137,500	150,000
Aux.	6,660	13,330	20,000	26,660	33,330	40,000						