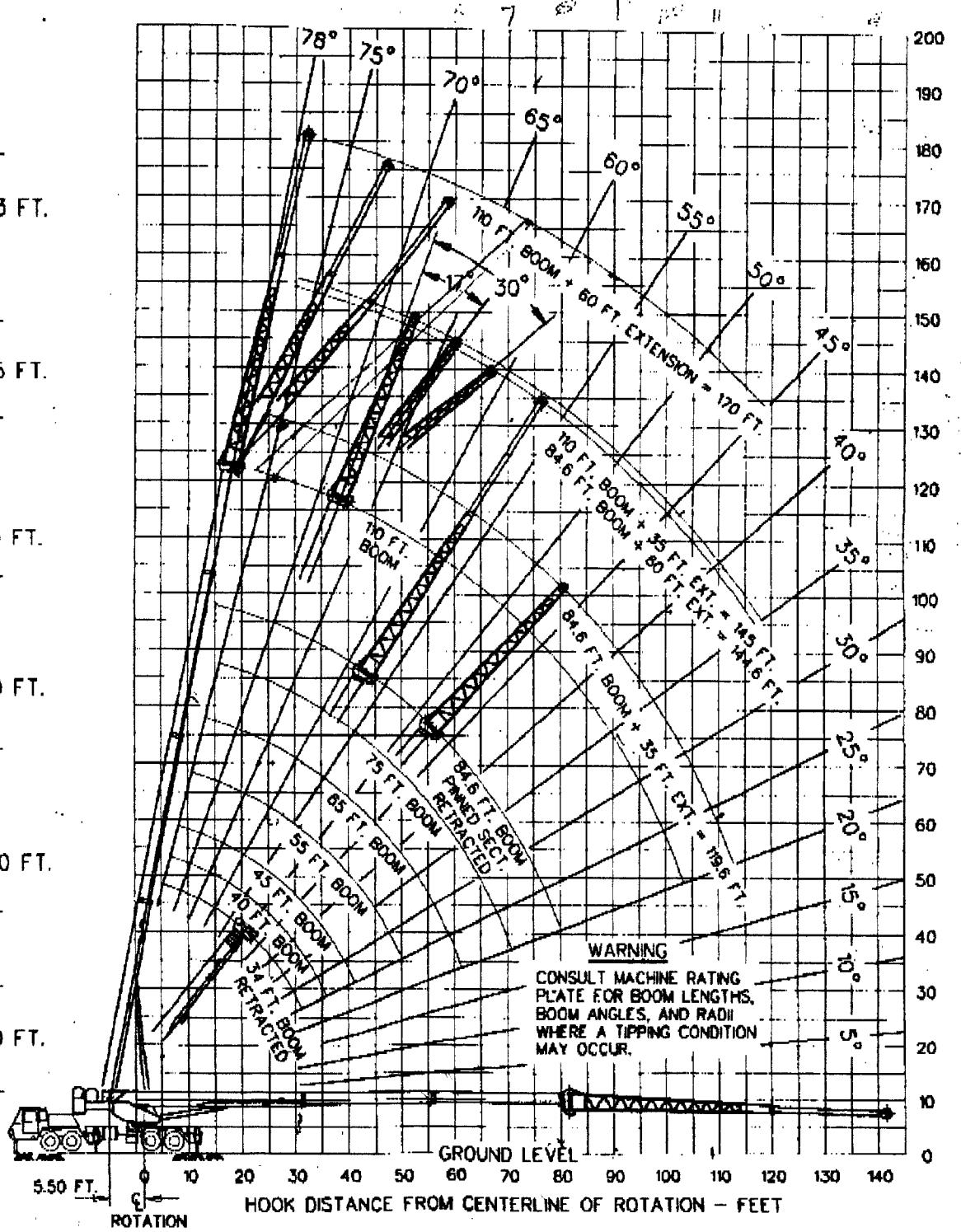
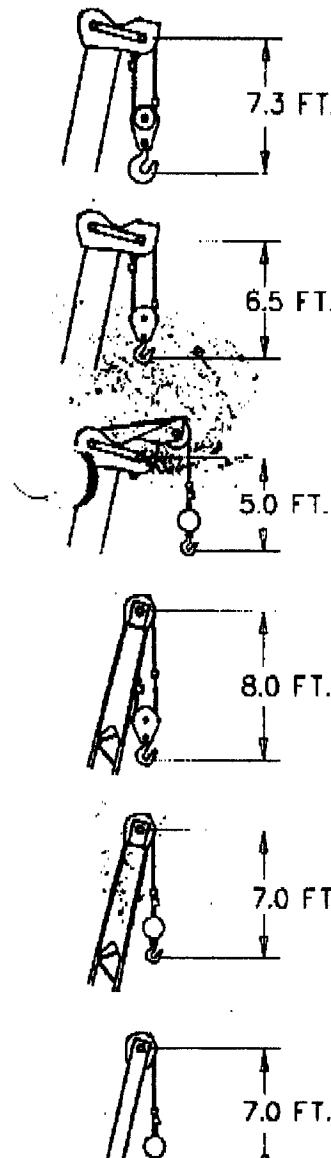


# P&H® CENTURY T-500

**50-ton hydraulic truck crane  
170-ft. (51.8 m) boom and extension**



**Specificati**

**PUMPS: DETROIT DIESEL ALLISON 6L71TA ENGINE:** One Tandem gear pump operating at 2480 full load RPM, with the first section providing 49.2 GPM (186 liter/min.) to the boom hoist and telescope circuits, and the second section providing 37.7 GPM (143 liter/min.) to the main and auxiliary winch circuit.

One Tandem gear pump operating at 2480 full load RPM, with the first section providing 32.1 GPM (121 liter/min.) to the swing circuit, and the second section providing 32.1 GPM (121 liter/min.) to the outrigger or boom float circuits.

One Vickers vane pump, driven from the engine accessory drive, operating at 2100 full load RPM, provides 19.5 GPM (74 liter/min.), regulated to 8 GPM (30 liter/min.) to the steering circuit.

**OIL RESERVOIR:** 156 gallons (590 liter) mounted at front, right side of engine frame.

**OIL COOLER:** Oil to air, tube and fin type with internal turbulator.

**CONTROL VALVES (STANDARD):** One single-spool valve for swing circuits.

One two-spool valve with one spool for boom hoist and one spool for telescope circuits.

One single-spool valve for main winch circuit.

**CONTROL VALVES (OPTIONAL):** One two-spool valve with one spool for main winch and one spool for auxiliary winch circuits.

One single-spool valve for independent winch circuit.



**SWING UNIT:** Hydraulic motor driving through reduction gear reducer to pinion gear. 360° continuous rotation to 2.4 RPM Full Load.

**SWING GEAR:** Single shear ball swing bearing with integral spur gear.

**SWING BRAKE:** Spring applied, hydraulically released, internal disc brake, integral with swing reducer. Hand brake control lever mounted on side console. A manual foot pedal applies brake for static holding.

**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 optional.



#### CARRIER

**TYPE:** PBH 8 x 4

**WEIGHT:** Including ball bearing swing circle, hydraulic outriggers and standard tires and Caterpillar 3208T engine. 33,457 lbs. (15,156 kg.)

**FRAME:** Rectangular frame members of 80,000 P.S.I. (5600 kg/cm<sup>2</sup>) yield strength alloy steel, reinforced with box constructed cross-members of 80,000 psi (5600 kg/cm<sup>2</sup>) yield strength alloy steel. Engine frame is channel construction of 47,000 P.S.I. (3300 kg/cm<sup>2</sup>) yield strength alloy steel.



**OUTRIGGERS:** Hydraulic out and down type. Eight double acting hydraulic cylinders for independent horizontal and vertical motion of each beam operated from the operator's cab or at each side of the carrier. Each vertical cylinder is equipped with a holding valve.

**OUTRIGGER BEAMS:** 80,000 P.S.I. yield strength alloy steel box extending to a maximum spread of 23' 7" (7.2 meters) from centerline of float to centerline float with the machine fully raised on the outriggers. Retracted width of the outriggers without float is 9' 10" (3.0 M).

**OUTRIGGER FLOATS:** Individually removable floats with storage on carrier. Float size 24" (610 mm) dia. with effective nominal surface area of 452 sq. in. (2920 cm<sup>2</sup>) per float.

**STEERING:** Hydraulic powered gear and integral valve with a hydraulic power assist cylinder on each front axle.



**CAB:** One man, left side, low profile fully enclosed all-weather steel cab with full vision safety glass. Cab is cushion mounted for vibration isolation.

**CAB EQUIPMENT:** Contains all controls and instrumentation, including illuminated instrument panel with speedometer, tachometer, hour meter, voltmeter, air pressure gauges, low air pressure indicator lights, fuel gauge, oil pressure gauge, water temperature gauge, air horns, west coast rear view mirror, electric windshield wiper, engine conditioning warning system with noise alarm and warning light for high temperature and low oil pressure, heater and defroster. Deluxe operator's seat with torsion suspension and vinyl covering.

**LIGHTS:** Dual headlights, taillights, stop lights, front and rear direction signals with emergency flashers, rear license plate light, front, rear and side marker reflectors, dome light, and front and rear

**CARRIER STANDARD EQUIPMENT:** Front bumper, full fenders, sliding engine hood, low hooks front and rear, carrier mounted boom rack, dunnage boxes, float storage racks and back-up warning device, windshield washer, and fire extinguisher.

**CARRIER OPTIONAL EQUIPMENT:** Cold starting aid, rotating beacon light, spare tire and wheel, pintle hook, alcohol evaporator, air dryer, tire inflation kit, and hydraulically operated front stabilizer with 24.0 inch (601 mm) diameter float. Two 8D batteries with a reserve capacity of 430 min. and CCA at 0°F of 900 amps.

**BRAKES, SERVICE:** Front Axles — air operated, cam actuated drum and shoe type.

Rear Axles — air operated, spring type safety chamber, cam actuated, drum and shoe type.

**BRAKES, PARKING:** Cam actuated, drum and shoe type on rear axles. Spring applied, air released for safety.

**FRONT AXLE:** Tubular tandem.

**REAR AXLE:** Single reduction with interaxle differential. Ratio 6.143:1.

**SUSPENSION:** Front Axle — Four spring mounted tandem with torque rods.

Rear Axle — Solid bogie mounted tandem with torque rods.

**TRANSMISSIONS:** Eaton Corp. Fuller Road Ranger RTO-11813, 13 speeds forward, 2 reverse, used with Detroit Diesel Allison 6L71TA Engine.

Eaton Corp. Fuller Road Ranger RT6813, 13 speeds forward, two reverse, used with Caterpillar 3208T Engine.

**CLUTCH:** Spicer 14 in. (358 mm) two plate with asbestos lining, coaxial torque damper, upshift clutch brake and air actuation assist.

**RADIATOR:** Water to air, tube and fin type core. Thermostatic temperature controlled.

**AIR CLEANER:** Donaldson single-stage primary dry air cleaner with "DuraLife" filter media.

**MUFFLER:** Donaldson — muffler and resonator.

**ELECTRICAL:** 24 volt system with negative ground. Two N150 batteries with a reserve capacity of 265 min. and CCA at 0°F of 840 amps. Wire harnesses have environmentally sealed Deutsch connectors.

**FUEL TANK:** FWHA approved steel tank, 80 gal. (303 liter) mounted on right side of carrier, behind front outriggers.

**TIRES:** Standard — Front 15.00 R 22.5 18 ply — rear 11.00 x 20 14 ply-duals. Optional — Front 16.00 R 22.5 18 ply — rear 12.00 x 20 18 ply-duals.



#### POWER PLANTS:

**Make:** Caterpillar 3208T

**Max. H.P.:** 250 hp (186 kw) at 2800 rpm.

**Max. Torque:** 840 ft./lb. (88.5 kg. - m) at 1400 rpm.

**No. Cyl.:** 8 cylinder, 4.5 in. (114.3 mm) bore, 5.0 in. (127 mm) stroke.

**Disp:** 836 cu. in. (14.2 liter)

**Cycle:** 4

**Alternator:** Delco 24 volt, 65 amp.

**Aspiration:** Turbocharged.

**Air Compressor:** Bendix TU-FLO 501.

**\*Theoretical Performance:**

Low Gear 1.6 mph (2.6 km/hr.) 41% grade.

High Gear 49 mph (79 km/hr.) 1.1% grade.

**Make:** Detroit Diesel Allison 6L71TA.

**Max. HP:** 265 hp (198 kw) at 2100 rpm.

**Max. Torque:** 737 ft./lb. (101.9 kg. - m) at 1400 rpm.

**No. Cyl.:** 6 cyl., 4.25 in. (107.9 mm) bore, 5.0 in. (127 mm) stroke.

**Disp:** 426 cu. in. (6.88 liter)

**Cycle:** 2

**Alternator:** Delco 24 volt, 65 amp.

**Aspiration:** Turbocharged.

**Air Compressor:** Bendix TU-FLO 501

**\*Theoretical Performance:**

Low Gear 2.2 mph (3.5 km/hr.) 35% grade.

High Gear 51 mph (82 km/hr.) 1.1% grade.

**\*Theoretical performance is based on the following:**

**GVW:** 77,000 lbs. (34,820 kg.)

**Front Tires:** 15.00 R 22.5

**Rear Tires:** 12.00 x 20

**Counterweight:** 8000 lbs. (3,630 kg.)

**Speed and gradeability will vary due to engine performance, vehicle weight and counterweight.** Gradeability based on SAE J688.



# specifications



**BOOM:** 34 ft. (10.4 m) retracted to 110 ft. (33.5 m) extended length, four section boom consisting of a boom base, two hydraulically extended and retracted sections and a fourth pinned section which can be hydraulically extended and retracted. Boom point has the 17,302' (44 mm) dia. main metallic sheave with roller bearings and idler sheaves with bronze bearings.

**EXTENSION (OPTIONAL):** 35 ft. (10.7 m) swing around lattice structure boom extension with a single metallic sheave. It can be put into operating condition by pivoting from its stored position on the right side of the boom base section. Self-storing pins connect extension to boom head. In the operating position the extension is offset 2° from the main boom.

**TELESCOPIC BOOM EXTENSION (OPTIONAL):** 95 ft. (10.7 m) to 60 ft. (18.3 m) swing around lattice structure boom extension with a welded four plate telescope section with a single metallic sheave. It can be put into operating condition by pivoting from its stored position on the right side of the boom base section and pinned to the boom head. Telescopic section is then extended on rollers and pinned. In the operating position the extension is offset 2° from the main boom.

**EXTENSION OFFSET MECHANISM (OPTIONAL):** Pivoting links which allow either boom extension above to be offset to 17° or 30° from the main boom.

**AUXILIARY SHEAVE (OPTIONAL):** Boom point mounted with single metallic sheave.

**HOOK BLOCKS (OPTIONAL):** 50 ton (45.4 metric ton) 5 sheave with swivel hook and safety latch. Sheaves are for .75 inch (19 mm) wire rope.

20 ton (18.1 metric ton) 1 sheave with swivel hook and safety latch. Sheave is for .75 inch (19 mm) wire rope.

**BALL HOOK (OPTIONAL):** 8.5 ton (7.7 metric ton) weighted swivel hook with safety latch, .75 inch (19 mm) wire rope.



## UPPERSTRUCTURE

**OPERATOR'S CAB:** Fully enclosed, all-weather steel cab with full-vision safety glass and hinged top window with tinted glass. Cab is cushion mounted for vibration isolation.

**OPERATOR'S CAB STANDARD EQUIPMENT:** Contains all crane function controls. Front control console includes: engine water temperature gauge, engine oil pressure gauge, hydraulic oil temperature gauge, air pressure gauge, fuel gauge, voltmeter, winch high speed indicators; anti-two-block warning, boom angle indicator, dash light, and electrical horn. Deluxe operator's seat with torsion suspension and vinyl covering, windshield wiper, fire extinguisher, and seat belts.

**OPERATOR'S CAB OPTIONAL EQUIPMENT:** Main winch drum turn indicator, diesel or propane heater, defroster fan, windshield washer, roof window wiper, rotary roof beacon and tachometer, hand control lever for independent main and auxiliary winch.



**CONTROLS:** Front console mounted hand control levers for swing, telescope, auxiliary winch (optional), main winch, and boom hoist. Front floor mounted foot pedals for swing brake, boom hoist, and engine throttle. Front console instrument panel contains ignition switch.

Side console has hand throttle control, swing lock control, and electrical outrigger panel — all standard.

**ELECTRICAL SYSTEM:** Electrical system is 24 volt negative ground. Wiring harnesses have protective covering and are independently clamped to framework. Wire harnesses have environmentally sealed Deutsch connectors. Toggle switches used in operator's cab are environmentally sealed.

**THROTTLE CONTROL:** Variable air control for foot operation, and positive position cable control for hand use.

**MISCELLANEOUS UPPER OPTIONS:** Load indicating device, flood lights, 360 degree swing lock, spooling roller, anti-two-block and load moment shutdown device.

**COUNTERWEIGHTS:** 8,000 lbs. (3,630 kg.) standard, non-removable type.

8,000 lbs. (3,630 kg.) with 7,525 lbs. (3,414 kg.) removable with a self-contained raising or lowering device using the winch.

1,060 lbs. (490 kg.) auxiliary counterweight to be used on units without an auxiliary winch.



**MAIN WINCH (STANDARD):** P&H Model 1581 with two speed motor, mounted to rear of revolving frame. Planetary gearing and equal speed, power raising and lowering. Infinitely variable speed control. Spring applied hydraulically released load holding multi-disc brake is automatic.

Drum: 15 in (381 mm) pitch diameter, 18.5 in. (470 mm) wide, 23.5 in. (597 mm) flange diameter.

Cable: .75 in (19 mm) diameter 6 x 25 extra improved plow steel with 7 x 7 I.W.R.C. Strength limit: 16,800 lbs. (7,619 kg.).

Drum Capacity: .75 in. (19 mm) Cable: 554 ft. (168 m), 5 layers.

Line Pull Maximum: 18,282 lbs. (8,291 kg.) 1st layer, low speed, 13,223 lbs. (5,997 kg.) 5th layer..

Maximum Available Line Pull for starting load mid-air, 5th layer: 11,000 lbs. (4,991 kg.).

Line Speed Maximum: (At 2750 Engine R.P.M. and with .75 in. Dia. cable) 842 ft./min. (196 meter/min.) 5th layer, high speed.

**AUXILIARY WINCH (OPTIONAL):** P&H Model 1581 with two speed motor, mounted to rear of revolving frame on the counterweight. Planetary gearing and equal speed, power raising and lowering. Infinitely variable speed control. Spring applied hydraulically released load holding multi-disc brake is automatic.

Drum: 15 in. (381 mm) pitch diameter, 18.5 in. (470 mm) wide, 23.5 in. (597 mm) flange diameter.

Cable (optional): .75 in. (19 mm) diameter 6 x 25 extra improved plow steel with 7 x 7 I.W.R.C. Strength limit: 16,800 lbs. (7,619 kg.).

Cable (optional): .75 in. (19 mm) diameter, 8 x 25 spin resistant, extra improved plow steel, 7 x 7 I.W.R.C. Strength limit: 10,380 lbs. (4,668 kg.).

Drum Capacity: .75 in. (19 mm) Cable: 554 ft. (168 m), 5 layers.

Line Pull Maximum: 18,282 lbs. (8,291 kg.) 1st layer, low speed, 13,223 lbs. (5,997 kg.) 5th layer (.75 in. cable).

Maximum Available Line Pull for starting load mid-air, 5th layer: 11,000 lbs. (4,991 kg.) (.75 in. cable).

Line Speed Maximum (At 2750 Engine R.P.M. and with .75 in. dia. cable): 842 ft./min. (196 M/min.) 5th layer, high speed.

Cable (optional): .625 in. (16 mm) diameter, 6 x 25 extra improved plow steel, 7 x 7 I.W.R.C.

Drum Capacity: .625 in. (16 mm) Dia. Cable: 646 ft. (199 m), 5 layers.

Line Pull Maximum: 18,437 lbs. (8,361 kg.) 1st layer, low speed, 13,950 lbs. (6,327 kg.) 5th layer (.625 in. cable).

Maximum Available Line Pull for starting load mid-air, 5th layer: 11,000 lbs. (4,991 kg.) (.625 in. cable).

Line Speed Maximum: (At 2750 engine R.P.M. and with .625 in. dia. cable) 608 ft./min. (185 M/min.), 5th layer, high speed.)

SHEAVE AND DRUM TO WIRE ROPE RATIOS: (Pitch Diameter)	Sheave to Wire Rope	Drum to Wire Rope
Main Boom Sheaves		
.75" Wire Rope	24.15:1	— —
.625" Wire Rope	28.78:1	— —
Main Winch		
.75" Wire Rope	— —	20.0:1
.625" Wire Rope	— —	23.8:1



**BOOM HOIST:** Two 7.87" (200 mm) I.D. cylinders, double-acting. Hydraulically powered raising and lowering with holding valve.

**BOOM TELESCOPE:** Two 6.3" (160 mm) I.D. cylinders — double-acting. Hydraulically powered raising and lowering with holding valve. Supplied by a single hose loop.

## HYDRAULIC SYSTEM

**FILTERS:** Two 10-micron nominal return line filters mounted in the hydraulic reservoir. All return oil is filtered. Indicators external.

**PUMP DRIVE:** Driven off carrier engine crankshaft, with manual pump disconnect for highway travel. 1.182 pump speed to 1.0 engine speed drive ratio for Detroit Diesel Allison 6L71TA Engine. 1.00 pump speed to 1.00 engine speed for Caterpillar 3208T Engine.

**PUMPS: CATERPILLAR 3208T ENGINE:** One Tandem gear pump operating at 2600 full load RPM, with the first section providing 51.6 GPM (195 liter/min.) to the boom hoist and telescope circuits, and the second section providing 39.5 GPM (150 liter/min.) to the main and auxiliary winch circuits.

One tandem gear pump operating at 2600 full load RPM, with the first section providing 33.8 GPM (127 liter/min.) to the swing circuit, the second section provides 33.8 GPM (127 liter/min.) to the outrigger or winch boost circuits.

An Eaton 1.85 cu. in. (27.04 cu. cm.) per revolution heavy duty power steering pump operating at full load RPM of 3120 RPM, provides 8 GPM (30.3 liter/min.) to steering circuit.

# LOAD RATINGS - PCSA CLASS 10-208

## With 8000 lbs. counterweight

RATED LOADS IN POUNDS ON OUTRIGGERS										POWERED BOOM LENGTH IN FEET - MANUAL RETRACTED									
Q/R SUSP. STAB.	RATED LOAD POUNDS	34 FT.		48 FT.		45 FT.		55 FT.		65 FT.		75 FT.		84.8 FT.					
		SIDE	REAR	SIDE	REAR	SIDE	REAR	SIDE	REAR	SIDE	REAR	SIDE	REAR	SIDE	REAR	SIDE	REAR	SIDE	REAR
10	86	100000	70	82000	72	81000	74	75000	77	60000	79	47200	81	34700	83	26100	85	10	
12	82	86000	67	81800	70	78500	74	84000	77	60000	79	47200	81	34700	83	26100	85	12	
15	56	71000	62	71000	65	70000	71	62000	74	54600	77	47200	81	34700	83	26100	85	15	
20	43	54000	53	54000	58	54000	65	53000	68	47300	73	38800	79	34700	81	26100	85	20	
25	29	42000	43	42000	54	41000	58	41200	59	40800	69	34600	73	29900	79	26100	85	24	
30			30	53700	40	53800	52	53300	59	53400	65	30000	68	26100	70	26100	85	30	
35				28	27100	27100	45	27100	27100	34	27100	27100	60	26400	64	22900	35		
40							37	20800	21200	49	20800	21200	65	20400	60	20400	40		
45							28	16100	16800	41	16100	16800	50	16100	16800	43			
50								34	15000	13700	45	15000	13700	57	13000	13700	56		
55								24	10500	11300	39	10500	11300	47	10300	11300	55		
60									32	8400	9200	42	8400	9200	60				
65									22	6900	7600	36	6900	7600	65				
70										20	5800	6300	30	5800	6300	70			
75										20	4500	5200	25	4500	5200	75			
80																		80	
85																		85	

LOAD RATINGS IN POUNDS WITH OUTRIGGERS EXTENDED										LATTICE EXTENSION WITH PINNED SECTION RETRACTED					LATTICE EXTENSION WITH PINNED SECTION EXTENDED					
PINNED SECTION EXTENDED					LATTICE EXTENSION WITH PINNED SECTION RETRACTED					LATTICE EXTENSION WITH PINNED SECTION EXTENDED					60 FT. TELESCOPIC					
Q/R SUSP. STAB.	RATED LOAD POUNDS	SIDE	REAR	ANGLE	Q/R SUSP. STAB.	RATED LOAD POUNDS	SIDE	REAR	ANGLE	Q/R SUSP. STAB.	RATED LOAD POUNDS	SIDE	REAR	ANGLE	Q/R SUSP. STAB.	RATED LOAD POUNDS	SIDE	REAR	ANGLE	
25	77	21500			25	78	17000			25	78	16400			25	78	17000			25
30	74	19800			30	78	15800			30	78	15100			30	78	17000			30
35	72	17800			35	73	14500			35	73	13900			35	73	17000			35
40	68	16100			40	71	13500			40	71	12900			40	71	16000			40
45	68	14700			45	68	12600			45	68	12000			45	72	16300			45
50	63	13400			50	68	11800			50	68	11200			50	70	16100			50
55	60	12200	12400		55	63	11100			55	63	10400			55	63	16700			55
60	57	10600	10700		60	60	10400			60	60	9800			60	60	16800			60
65	53	8800	8900		65	57	8180	8800		65	57	8180	8800		65	64	9400			65
70	50	7200	7900		70	54	6800	8200		70	54	6800	7400		70	62	9200			70
75	46	6100	6700		75	51	6400	7100		75	51	5700	6300		75	60	9000			75
80	43	5100	5800		80	48	4700	5300		80	48	4700	5300		80	57	4900			80
85	38	4300	4900		85	44	3900	4400		85	44	3900	4400		85	55	4400			85
90	33	3600	4200		90	40	3100	3700		90	40	3100	3700		90	52	4400			90
100	19	2400	3000		100	32	2700	3500		100	32	1900	2500		100	41	2200			100
					100	34	-	1800		100	34	-	1800		100	41	-	1800		100
<b>NOTE:</b>										<b>WARNING:</b>					A TIPPING CONDITION WILL OCCUR (WITH OR WITHOUT HOOK BLOCK) WITH 35 FT. OR 60 FT. BOOM EXTENSION ERECTED, IF MAXIMUM OPERATING RADIUS SHOWN WITH LOAD RATING FOR RESPECTIVE OPERATING CONFIGURATION IS EXCEEDED.					

DEDUCTIONS TO BE MADE FROM LOAD RATINGS IN POUNDS									
DESCRIPTION		HOBSON HOOK BLOCK ON BOOM TILT		HOBSON HOOK BLOCK ON BOOM FLAT		HOBSON HOOK BLOCK ON BOOM VERT.		MAIN HOIST REEVEING	
		15° - 20° TON	45°-50° TON	35°-40° TON WITH ADDITIONAL SHEAVE		45°-50° TON WITH ADDITIONAL SHEAVE		3/4 DIA. WIRE ROPE BREAKING STRENGTH 34,800 LBS.	
HOBSTING LOAD FROM POWERED BOOM		580	950	750	1100	850	1250	1	2
20 FT. LATTICE EXTENSION	ERECTED ONLY	700	1100	850	1200	950	1300	3	4
	6.5 TON BALL	3650	3900	3700	4000	4650	5200	35000	34000
	20 TON BLOCK	4700	5050	4850	5200	5650	6200	35000	34000
20 FT. TELESCOPIC LATTICE EXTENSION	ERECTED ONLY	5500	5850	5550	6000	6500	7000	35000	34000
	6.5 TON BALL	6550	7000	6600	7150	7550	8100	35000	34000
	20 TON BLOCK	7950	8550	8100	8600	9100	9600	35000	34000
60 FT. TELESCOPIC LATTICE EXTENSION	ERECTED ONLY	5500	5850	5450	6000	6500	7000	35000	34000
	6.5 TON BALL	7100	7450	7250	7600	7950	8400	35000	34000
	20 TON BLOCK	8600	9100	8300	9000	9500	10000	35000	34000
60 FT. TELESCOPIC LATTICE EXTENSION	ERECTED ONLY	5500	5850	5450	6000	6500	7000	35000	34000
	6.5 TON BALL	270	350	250	350	350	450	35000	34000
	20 TON BLOCK	350	450	1150	1050	1250	1300	35000	34000
60 FT. TELESCOPIC LATTICE EXTENSION	ERECTED ONLY	5500	5850	5450	6000	6500	7000	35000	34000
	6.5 TON BALL	270	350	250	350	350	450	35000	34000
	20 TON BLOCK	350	450	1200	1050	1300	1350	35000	34000
60 FT. TELESCOPIC LATTICE EXTENSION	ERECTED ONLY	5500	5850	5450	6000	6500	7000	35000	34000
	6.5 TON BALL	270	350	250	350	350	450	35000	34000
	20 TON BLOCK	350	450	1150	1050	1250	1300	35000	34000
NOTE: THESE LOAD REDUCTIONS APPLY ONLY TO PAY SUPPLIED EQUIPMENT.									

MAIN HOIST REEVEING										6 x 75 FW IWC	
PART OF LINE		1	2	3	4	5	6	7	8	9	10
MAXIMUM LOAD	11800	72000	33000	44000	35000	16000	17000	80000	85000	90000	100000
AUXILIARY HOIST REEVEING											
5/8 DIA. WIRE ROPE BREAKING STRENGTH 51,800 LBS.											
5/8 DIA. WIRE ROPE BREAKING STRENGTH 41,200 LBS.											
PART OF LINE	1	2	3	4	5	6	7	8	9	10	

# LOAD RATINGS for Offset Lattice Extension with 8,000 lb. counterweight

LOAD RATINGS IN POUNDS FOR 17° OFFSET WITH OUTRIGGERS EXTENDED													
LATTICE EXTENSION WITH PINNED SECTION RETRACTED													
OPERATING RADIUS	35 FT.		35 FT. TELESCOPIC		60 FT. TELESCOPIC		35 FT.		35 FT. TELESCOPIC		60 FT. TELESCOPIC		
	SEE DEDUCTIONS	LOAD	SEE DEDUCTIONS	LOAD									
FOR 119.6 FOOT BOOM ONLY	FOR ALL BOOM LENGTHS 69 TO 119.6 FT.	RATED LOAD IN POUNDS	FOR ALL BOOM LENGTHS 69 TO 119.6 FT.	RATED LOAD IN POUNDS	FOR ALL BOOM LENGTHS 94 TO 144.6 FT.	RATED LOAD IN POUNDS	FOR ALL BOOM LENGTHS 94.3 TO 145 FT.	RATED LOAD IN POUNDS	FOR ALL BOOM LENGTHS 94.3 TO 145 FT.	RATED LOAD IN POUNDS	FOR ALL BOOM LENGTHS 119.3 TO 170 FT.	RATED LOAD IN POUNDS	
35	77	11100	35	77	10400	35	77	9700	35	77	9100	35	77
40	74	10400	40	75	9900	40	75	9000	40	75	8300	40	75
45	72	9900	45	72	9300	45	72	8300	45	72	7600	45	72
50	69	9500	50	69	8900	50	76	5200	50	75	7000	50	75
55	67	9100	55	67	8500	55	74	5100	55	73	6500	55	73
60	64	8700	60	64	8100	60	72	4900	60	70	6000	60	70
65	61	8400	65	61	7800	65	70	4700	65	68	5500	65	68
70	58	8100	70	58	7500	70	67	4500	70	66	5200	70	66
75	55	7600	75	55	6300	75	65	4300	75	54	4800	75	54
80	52	6600	80	52	5200	80	63	4100	80	61	4500	80	61
85	48	5700	85	48	4300	85	60	3900	85	59	4200	85	59
90	44	4800	90	44	3500	90	58	3700	90	56	4000	90	56
100	35	3500	100	35	2200	100	52	3500	100	51	3600	100	51
110	21	-	110	21	-	110	46	2700	110	44	2500	110	44
		2300			2100		39	-	37	-	2200	52	2000
												2400	

LOAD RATINGS IN POUNDS FOR 30° OFFSET WITH OUTRIGGERS EXTENDED													
LATTICE EXTENSION WITH PINNED SECTION RETRACTED													
OPERATING RADIUS	35 FT.		35 FT. TELESCOPIC		60 FT. TELESCOPIC		35 FT.		35 FT. TELESCOPIC		60 FT. TELESCOPIC		
	SEE DEDUCTIONS	LOAD	SEE DEDUCTIONS	LOAD									
FOR 119.6 FOOT BOOM ONLY	FOR ALL BOOM LENGTHS 69 TO 119.6 FT.	RATED LOAD IN POUNDS	FOR ALL BOOM LENGTHS 69 TO 119.6 FT.	RATED LOAD IN POUNDS	FOR ALL BOOM LENGTHS 94 TO 144.6 FT.	RATED LOAD IN POUNDS	FOR ALL BOOM LENGTHS 94.3 TO 145 FT.	RATED LOAD IN POUNDS	FOR ALL BOOM LENGTHS 94.3 TO 145 FT.	RATED LOAD IN POUNDS	FOR ALL BOOM LENGTHS 119.3 TO 170 FT.	RATED LOAD IN POUNDS	
35			35			35			35			35	
40	78	8900	40	78	8300	40	75	7600	40	72	7400	40	72
45	75	8500	45	75	7900	45	72	7200	45	72	6900	45	72
50	72	8200	50	72	7600	50	70	7400	50	70	6400	50	70
55	70	8000	55	70	7400	55	68	7100	55	68	5900	55	68
60	67	7700	60	67	7100	60	76	4200	60	73	6600	60	73
65	64	7500	65	64	6900	65	74	4000	65	71	5200	65	71
70	61	7300	70	61	6700	70	72	3800	70	68	5500	70	68
75	57	7200	75	58	6600	75	69	3700	75	66	5200	75	66
80	54	6900	80	54	5600	80	67	3600	80	63	5600	80	63
85	50	5900	85	50	4600	85	64	3500	85	61	5300	85	61
90	46	5100	90	46	3800	90	62	3400	90	58	5000	90	58
100	36	3600	100	36	2300	100	56	3200	100	52	3800	100	52
110	19	2300	110	49	3000	110	46	2700	110	46	2400	110	46
			41		2000	41		38		38	1800	55	
												2300	

- NOTES:
1. SEE MAIN LOAD RATING CHART ON OUTRIGGERS FOR WARNINGS, DEFINITIONS, INFORMATION AND REEVING.
  2. FOR BUCKET RATINGS ON 60 FT. EXTENSION, DEDUCT 20% FROM LOAD RATINGS.
  3. STABILITY RATINGS DO NOT EXCEED 85% OF TIPPING LOADS.
  4. WHEN BOOM IS NOT FULLY EXTENDED USE ONLY BOOM ANGLES, NOT OPERATING RADIUS TO DETERMINE LOAD RATING.
  5. FOR BOOM ANGLES NOT SHOWN, USE RATING OF NEXT LOWER BOOM ANGLE.
  6. 8000 LB. STANDARD COUNTERWEIGHT OR 8000 LB. OPTIONAL CWT. INCLUDING 7525 LB. REMOVABLE WT.

### WARNINGS:

A TIPPING CONDITION WILL OCCUR (WITH OR WITHOUT HOOK BLOCK) WITH 35 FT. OR 60 FT. BOOM EXTENSION ERECTED, IF MAXIMUM OPERATING RADIUS SHOWN WITH LOAD RATING FOR RESPECTIVE OPERATING CONFIGURATION IS EXCEEDED.

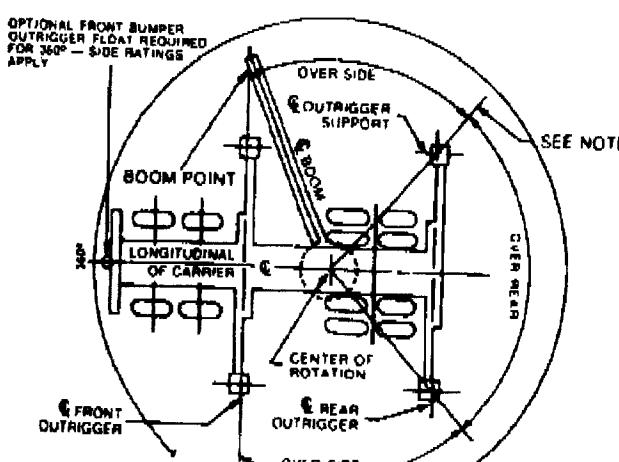
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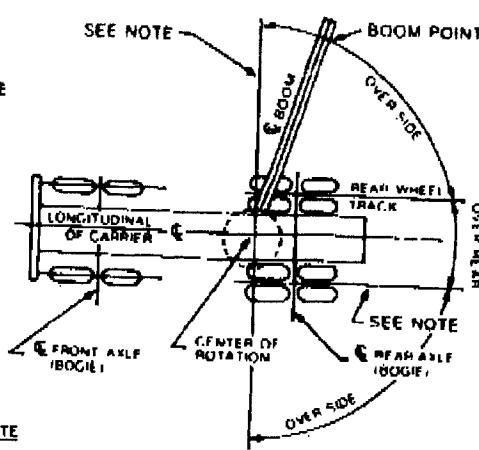
WEIGHT DISTRIBUTION-FOR PUBLICATION						
	POUNDS		KILOGRAMS			
	CROSS	FRONT	NEAR	CROSS	FRONT	REAR
BASIC CARRIER	134577	15000	16448	15176	6800	8368
BASIC UPPER	5447	4457	4983	2468	203	2265
STANDARD OPTIONS:						
10 FT. 45° C. BOOM	17555	17404	4415	7963	5960	2003
BOOM HOIST LVI INST.	2063	3041	1023	936	472	464
5000 LB COUNTERWEIGHT	5076	3226	1124	3636	1463	5099
MAIN WINCH MUL 1501	1280	-301	1381	490	136	526
MAIN WINCH ROPE .75 IN. X 515 FT.	536	149	585	241	68	311
AUX WINCH OR 1000 LB COUNTERWEIGHT	1080	437	1018	490	104	668
CATERPILLAR .320KI ENGINE	3646	3618	28	1654	1641	13
FRONT TIRES & RIMS -14J 15.00R22.5 18 PR	1237	1237	0	581	561	D
REAR TIRES & RIMS -16J 15.00R20 16 PR	2037	0	2037	824	0	924
TWO POSITION SWING LOCK	9	1	8	4	0	4
BASIC MACHINE	7615	30380	4578	34545	13780	20765
ADJUSTMENTS FOR OPTIONS:						
BASIC MACHINE						
REMOVABLE 7510 LB COUNTERWEIGHT	7577	3048	-10523	-3414	1392	4795
DETROIT DIESEL 6L71TA ENGINE	642	681	-39	291	309	18
FRONT TIRES & RIMS -14J 16.00R22.5 18 PR	103	103	0	47	47	n
REAR TIRES & RIMS -16J 17.00R20 16 PR	170	0	170	77	0	77
MULTI POSITION SWING LOCK	53	7	26	15	3	12
ADDITIONS FOR OPTIONS:						
ATTACHMENTS						
35 FT. BOOM EXTENSION	1735	1353	387	787	614	173
35 FT. - 40 FT. BOOM EXTENSION	2849	2150	750	1315	875	340
BOOM EXTENSION OFFSET INST.	201	331	-131	91	150	-59
AUXILIARY SHEAVE	152	267	-16	69	121	52
45 TON 4 SHEAVE HOOK BLOCK	809	1429	629	408	648	-240
TRAVEL SUPPORT ARM TO OUTRIGGERS	946	1502	557	429	681	-732
20 TON 1.5 SHEAVE HOOK BLOCK	580	184	764	283	883	346
8.5 TON HALL HOOK BLOCK OUTRIGGER TO OUTRIGGERS	265	-84	348	120	38	158
AUX WINCH ROPE .75 IN. DIA. X 460 FT.	487	-197	685	221	-88	310
AUX WINCH ROPE .625 IN. DIA X 460 FT.	730	298	1025	331	-134	465
UPPER						
INDEPENDENT MAIN & AUX. WINCH	410	-12	427	466	5	101
AUX. WINCH PLUMBING & CONTROLS	82	-12	94	37	-6	43
DIESEL HEATER	53	1	54	24	0	24
PROPANE HEATER	55	-1	56	25	0	25
PROPANE TANK FULL	49	-2	51	22	-1	23
FLOODLIGHTS	53	21	15	16	9	7
CARRIER						
HYDRAULIC FRONT STABILIZER	455	671	-706	211	304	-93
CHUTE HOOK	26	-10	37	12	-5	17
AIR DRYER	37	19	15	17	9	8

## areas of operation

### ON OUTRIGGERS



### ON RUBBER



#### NOTE

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

# LOAD RATINGS ON TIRES

**With 8,000 lb. counterweight**

**8,000 lb. counterweight  
with 7,525 lb. weight removed**

OPERATING RADIUS IN FEET	LOAD RATINGS IN POUNDS				OPERATING RADIUS IN FEET	
	11.00 X 20-14 PR TIRES		12.00 X 20-16 PR TIRES			
	STATIONARY		TRAVEL RATINGS OVER REAR			
	OVER REAR	OVER SIDE	CREEP	2.5 MPH		
10	35200	25900	35200	28600	10	
12	30500	22000	30500	25500	12	
15	26100	15200	26100	22300	15	
20	20900	8700	20900	17700	20	
25	14800	5200	14800	14400	25	
30	10700	3000			30	
35	7900				35	
40	5900				40	
45	4300				45	
50	3100				50	

OPERATING RADIUS IN FEET	LOAD RATINGS IN POUNDS				OPERATING RADIUS IN FEET	
	11.00 X 20-14 PR TIRES		12.00 X 20-16 PR TIRES			
	STATIONARY		TRAVEL RATINGS OVER REAR			
	OVER REAR	OVER SIDE	CREEP	2.5 MPH		
10	31200	20300	31200	26700	10	
12	27200	14100	27200	23100	12	
15	23500	8800	23500	19800	15	
20	16500	4200	16500	15700	20	
25	11100	1800	11100	11100	25	
30	7700				30	
35	5400				35	
40	3700				40	
45	2400				45	
50	1400				50	

## WARNINGS:

1. CRANE LOAD RATINGS WITHOUT OUTRIGGERS DEPENDS ON TIRE CAPACITY AND CONDITION OF TIRES INFLATED PER TABLE.
2. WHEN TRANSPORTING A LOAD, MACHINE MUST BE ON FIRM, LEVEL SURFACE WITH MECHANICAL HOUSLOCK ENGAGED. THE LOAD MUST BE CENTERED OVER REAR OF MACHINE AND RESTRAINED FROM SWINGING. SEE AREAS OF OPERATION PLATE FOR WORKING RANGES.
3. LIFT LOADS WITH MINIMUM BOOM LENGTH; DO NOT EXCEED 65 FEET BOOM LENGTH WHEN LIFTING ON TIRES.
4. DO NOT ATTEMPT LIFTS ON TIRES WITH EXTENSION ERECTED.
5. MAXIMUM RECOMMENDED BOOM ANGLE ON TIRES IS 66° WITHOUT LOAD.

## INFORMATION:

1. DEDUCTIONS MUST BE MADE FROM RATED LOADS FOR STOWED LATTICE EXTENSION, OPTIONAL ATTACHMENTS, HOOKS AND HOOKBLOCKS. (SEE DEDUCTION CHART). WEIGHTS OF SLINGS, AND ALL OTHER LOAD HANDLING DEVICES SHALL BE CONSIDERED A PART OF THE LOAD.
2. RATINGS ABOVE THE HEAVY LINE ARE BASED ON STRUCTURAL COMPETENCE AND NOT ON MACHINE STABILITY.
3. IT IS RECOMMENDED THAT OUTRIGGERS BE EXTENDED AS FAR AS POSSIBLE AND CLEAR OF GROUND WHEN LIFTING ON TIRES.
4. STABILITY RATINGS DO NOT EXCEED 75% OF TIPPING LOADS.

DESCRIPTION	DEDUCTIONS TO BE MADE FROM LOAD RATINGS IN POUNDS			
	HOOK BLOCK ON POWERED BOOM POINT 8.5-20 TON	45-50 TON WITH AUX. SHEAVE	8.5-20 TON WITH AUX. SHEAVE	45-50 TON WITH AUX. SHEAVE
HOOK BLOCK WEIGHT	580	950	740	1100
STOWED LATTICE	35 FT. BOOM EXTENSION	900	1300	1100
	60 FT. TELESCOPIC BOOM EXTENSION	1100	1450	1250
				1600

NOTE: LOAD DEDUCTIONS APPLY ONLY TO P&H SUPPLIED EQUIPMENT.

## DEFINITIONS:

1. CREEP IS MOTION FOR LESS THAN 200 FT. IN A 30 MINUTE PERIOD AND NOT EXCEEDING 1 M.P.H.

## NOTES:

OPERATION OF THIS EQUIPMENT IN EXCESS OF RATED LOADS AND DISREGARD OF INSTRUCTIONS IS AN UNSAFE PRACTICE AND WILL RESULT IN DENIAL OF WARRANTY CLAIMS.

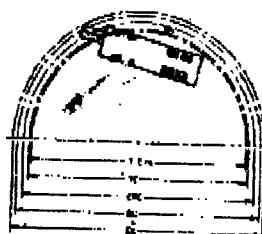
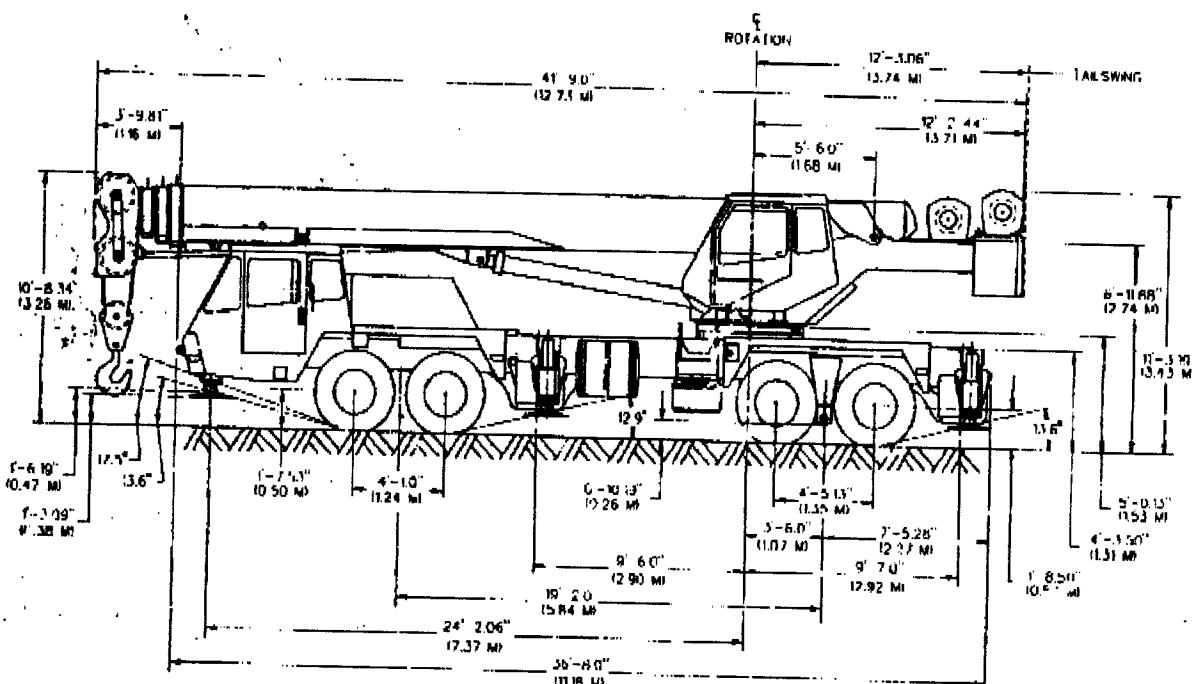
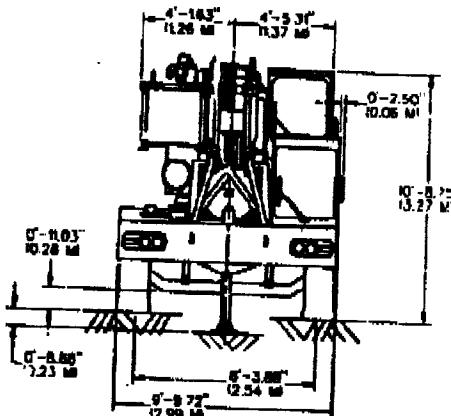
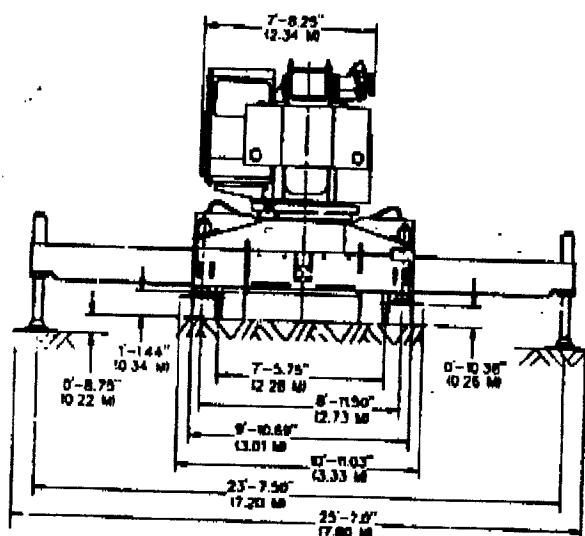
TIRE INFLATION			
SIZE	STATIC PSI	CREEP PSI	2.5 MPH PSI
11.00X20-14 PR	110	110	110
12.00X20-16 PR	115	115	115
15.0RX22.5-18PR	130	130	130
16.5RX22.0-18PR	125	125	125

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## **DIMENSIONS**

הנִּזְבָּחַ מֵעַל־עֲלֹתָיו וְעַל־מִזְבֵּחַ תְּמִימָה  
מִזְבֵּחַ תְּמִימָה וְעַל־מִזְבֵּחַ תְּמִימָה  
מִזְבֵּחַ תְּמִימָה וְעַל־מִזְבֵּחַ תְּמִימָה



MORGAN/COLTON EQUIP. CO.  
14480 ALONDRA BLVD.  
LA MIRADA, CA. 90638  
213-868-4754 - 714-521-6410

**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-22-54.

