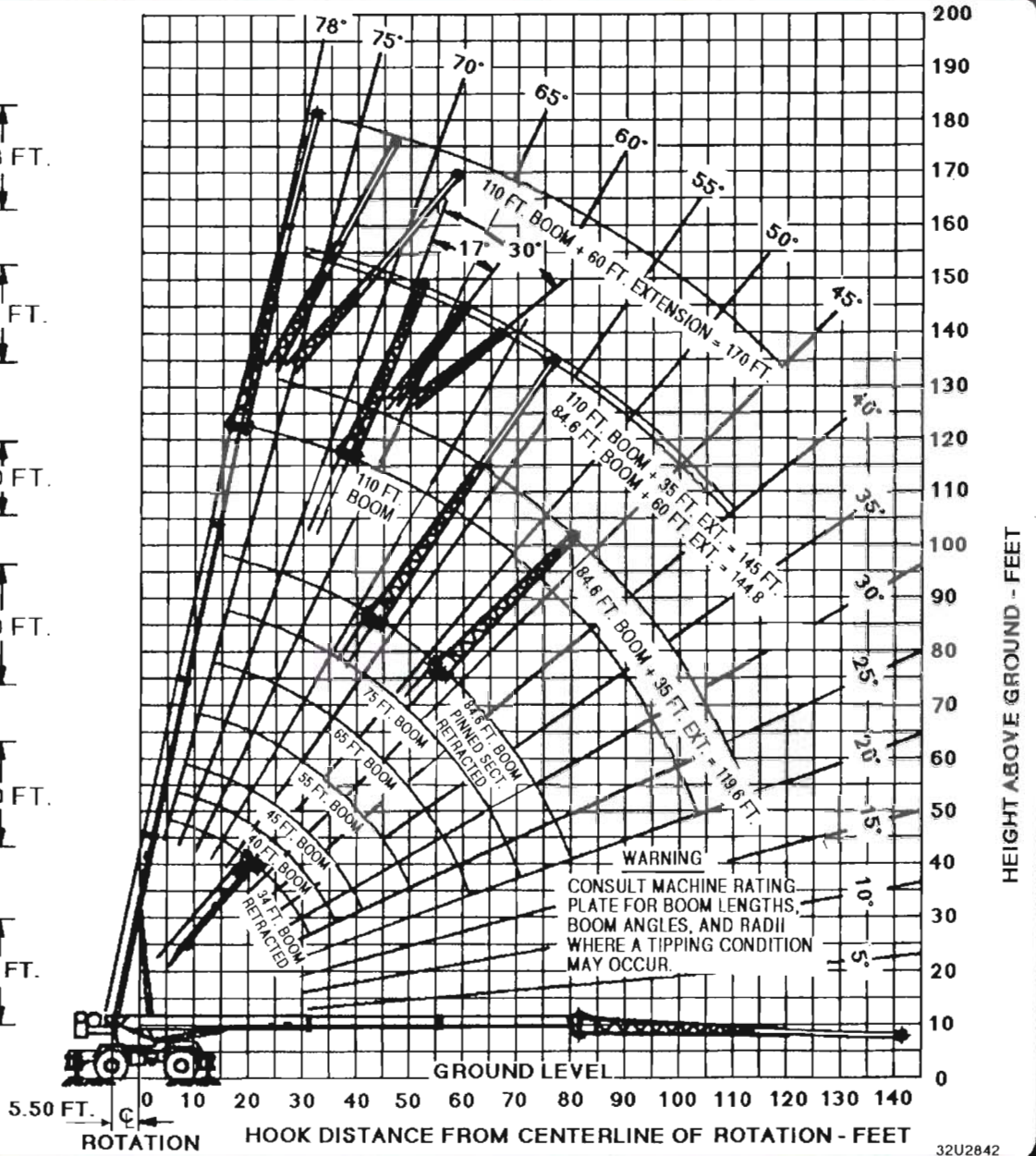
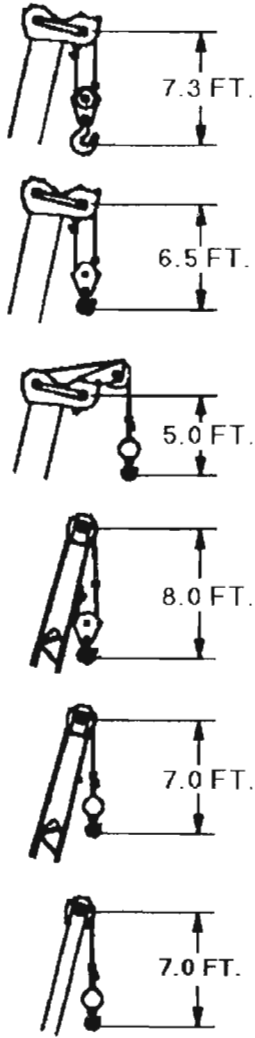


Crane Range Diagram

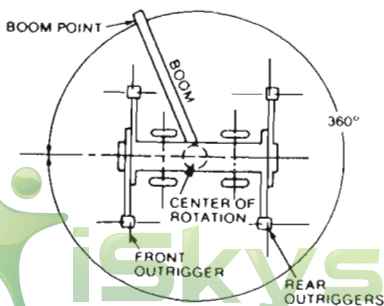
CHART 1



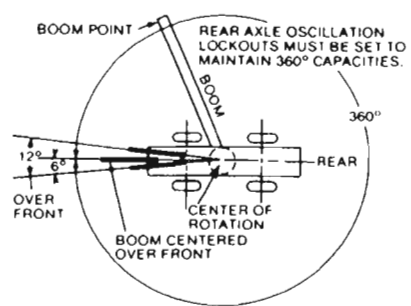
32U2842

Areas of Operation

ON OUTRIGGERS



ON TIRES



PCSA CLASS 10-211

Load Ratings with 9000 lbs. Counterweight

OPERATING RADIUS IN FT.	RATED LOADS IN POUNDS ON OUTRIGGERS											OPERATING RADIUS IN FT.			
	34 FT.	40 FT.	45 FT.	55 FT.	65 FT.	75 FT.	84.6 FT.	Diagram							
	360°	360°	360°	360°	360°	360°	360°	Diagram							
10	66	10000	70	82000	72	81000	76	75000					10		
12	62	86000	67	81500	70	76500	74	69000	77	60000			12		
15	56	71000	62	71000	65	70000	71	62000	74	54900	77	47200	15		
20	45	54000	53	54000	58	54000	65	53000	69	47300	73	39900	75	34700	20
25	29	42000	43	42000	50	41900	59	41700	65	40800	69	34400	72	29900	25
30			30	33700	40	33600	52	33500	59	33400	65	30000	68	26100	30
35					28	27700	45	27700	54	27700	60	26400	64	22900	35
40							37	21100	48	21100	55	21100	60	20400	40
45							26	16500	41	16500	50	16500	56	16500	45
50									34	13200	45	13200	52	13200	50
55									24	10800	39	10800	47	10800	55
60											32	8700	42	8700	60
65											22	7100	36	7100	65
70													29	6000	70
75													20	4800	75

DEFINITIONS:

3232R25

1. Operating radius is the horizontal distance from the axis of rotation before loading to the center of the vertical hoist line or tackle with load applied.
2. Loaded boom angle, as shown in column headed by Δ° , is the included angle between the horizontal and longitudinal axes of the boom base after lifting rated load at rated radius.

CHART 3

LOAD RATINGS IN POUNDS WITH OUTRIGGERS FULLY EXTENDED AND SET

PINNED SECTION EXTENDED			LATTICE EXTENSION WITH PINNED SECTION RETRACTED						LATTICE EXTENSION WITH PINNED SECTION EXTENDED						
OPERATING RADIUS IN FT.	Diagram		35 FT.		35 FOOT TELESCOPIC		60 FT.		35 FT.		35 FOOT TELESCOPIC		60 FT.		
	360°	RATED LOAD IN POUNDS	360°	RATED LOAD IN POUNDS	360°	RATED LOAD IN POUNDS	360°	RATED LOAD IN POUNDS	360°	RATED LOAD IN POUNDS	360°	RATED LOAD IN POUNDS	360°	RATED LOAD IN POUNDS	
25	77	21500	25	78	17000	25	78	16400	25			25			
30	74	19600	30	76	15600	30	76	15100	30			30			
35	72	17800	35	73	14500	35	73	13900	35	76	7100	35	77	12000	
40	69	16100	40	71	13500	40	71	12900	40	74	6600	40	75	10900	
45	66	14700	45	68	12600	45	68	12000	45	72	6300	45	73	10100	
50	63	13400	50	66	11800	50	66	11200	50	70	6100	50	71	9300	
55	60	12300	55	63	11100	55	63	10400	55	69	5700	55	69	8500	
60	57	10100	60	60	10400	60	60	9800	60	66	5500	60	67	7900	
65	53	8500	65	57	9100	65	57	8300	65	64	5400	65	65	7300	
70	50	7300	70	54	7700	70	54	7000	70	62	5200	70	63	6800	
75	46	6100	75	51	6600	75	51	5800	75	60	5100	75	60	6300	
80	42	5200	80	48	5600	80	48	4800	80	57	4900	80	58	5900	
85	38	4400	85	44	4700	85	44	4000	85	55	4600	85	56	5300	
90	33	3700	90	41	4000	90	40	3200	90	52	4400	90	53	4600	
100	19	2600	100	32	2800	100	32	2000	100	47	3300	100	47	3400	
									110	41	2300	110	41	2400	
													120	47	1800

NOTE:

1. When boom is not fully extended, use only boom angles, not operating radius to determine load rating.
2. For boom angles not shown, use rating of next lower boom angle.
3. For bucket rating on 60 ft. extensions, deduct 20% from load ratings.

WARNING:

A tipping condition will occur (with or without hook block) with 35 or 60 ft. boom extension erected, if maximum operating radius shown with load rating for respective operating configuration is exceeded.

(3232R25)

Load Ratings for Offset Extension with 9000 lbs. Counterweight

CHART 4

17° OFFSET EXTENSION IN POUNDS WITH OUTRIGGERS FULLY EXTENDED AND SET

LATTICE EXTENSION WITH PINNED SECTION RETRACTED						LATTICE EXTENSION WITH PINNED SECTION EXTENDED						
OPERATING RADIUS IN FT.	35 FT.		35 FT. TELESCOPIC		60 FT.		35 FT.		35 FT. TELESCOPIC		60 FT.	
	FOR ALL BOOM LENGTHS 69 TO 119.6 FT.		FOR ALL BOOM LENGTHS 69 TO 119.6 FT.		FOR ALL BOOM LENGTHS 94 TO 144.6 FT.		FOR ALL BOOM LENGTHS 94.3 TO 145 FT.		FOR ALL BOOM LENGTHS 94.3 TO 145 FT.		FOR ALL BOOM LENGTHS 119.3 TO 170 FT.	
FOR 119.6 FT. BOOM ONLY	RATED LOAD IN POUNDS		RATED LOAD IN POUNDS		RATED LOAD IN POUNDS		RATED LOAD IN POUNDS		RATED LOAD IN POUNDS		RATED LOAD IN POUNDS	
	360°		360°		360°		360°		360°		360°	
35	77	11100	35	77	10400	35		35		35		35
40	74	10400	40	75	9900	40		40		40		40
45	72	9900	45	72	9300	45	78	5400	45	77	9100	45
50	69	9500	50	69	8900	50	76	5200	50	75	8300	50
55	67	9100	55	67	8500	55	74	5100	55	73	7600	55
60	64	8700	60	64	8100	60	72	4900	60	71	7000	60
65	61	8400	65	61	7800	65	70	4700	65	68	6500	65
70	58	8100	70	58	7500	70	67	4500	70	66	6000	70
75	55	7100	75	55	6500	75	65	4300	75	64	5600	75
80	52	6100	80	52	5400	80	63	4100	80	61	5200	80
85	48	5200	85	48	4400	85	60	3900	85	59	4800	85
90	44	4400	90	44	3600	90	58	3700	90	56	4200	90
100	35	3000	100	35	2200	100	52	3500	100	51	2900	100
						110	46	2800	110	44	1800	110
												120
												52
												2200

NOTES

- See Main Load Rating Chart on outriggers for warnings, definitions, information and reeving.
- For Bucket Ratings on 60 ft. extension, deduct 20% from load ratings.
- Stability ratings do not exceed 85% of tipping loads
- When boom is not fully extended, use only boom angles, not operating radius to determine load rating.
- For boom angles not shown, use rating of next lower boom angle.
- 9000 lb. counterweight.

(32U2843)

CHART 5

30° OFFSET EXTENSION IN POUNDS WITH OUTRIGGERS FULLY EXTENDED AND SET

LATTICE EXTENSION WITH PINNED SECTION RETRACTED						LATTICE EXTENSION WITH PINNED SECTION EXTENDED						
OPERATING RADIUS IN FT.	35 FT.		35 FT. TELESCOPIC		60 FT.		35 FT.		35 FT. TELESCOPIC		60 FT.	
	FOR ALL BOOM LENGTHS 69 TO 119.6 FT.		FOR ALL BOOM LENGTHS 69 TO 119.6 FT.		FOR ALL BOOM LENGTHS 94 TO 144.6 FT.		FOR ALL BOOM LENGTHS 94.3 TO 145 FT.		FOR ALL BOOM LENGTHS 94.3 TO 145 FT.		FOR ALL BOOM LENGTHS 119.3 TO 170 FT.	
FOR 119.6 FT. BOOM ONLY	RATED LOAD IN POUNDS		RATED LOAD IN POUNDS		RATED LOAD IN POUNDS		RATED LOAD IN POUNDS		RATED LOAD IN POUNDS		RATED LOAD IN POUNDS	
	360°		360°		360°		360°		360°		360°	
40	78	8900	40	78	8300	40		40		40		40
45	75	8500	45	75	7900	45		45		45		45
50	72	8200	50	72	7600	50		50	77	8100	50	50
55	70	8000	55	70	7400	55		55	75	7600	55	55
60	67	7700	60	67	7100	60	76	4200	60	73	7100	60
65	64	7500	65	64	6900	65	74	4000	65	71	6600	65
70	61	7300	70	61	6700	70	72	3800	70	68	6200	70
75	57	7200	75	58	6600	75	69	3700	75	66	5900	75
80	54	6500	80	54	5700	80	67	3600	80	63	5600	80
85	50	5500	85	50	4800	85	64	3500	85	61	5300	85
90	46	4600	90	46	3900	90	62	3400	90	58	5000	90
100	36	3100	100	36	2300	100	56	3200	100	52	3900	100
110	19	1800				110	49	3000	110	46	2800	110
						120	41	2100	120	38	1900	120
												120
												55
												2300

For information and warnings about crane operations, see page 10.

(32U2843)

Load Ratings on Tires

CHART 6

LOAD RATINGS IN POUNDS					
O R P A R A T I N F T.	26.5 X 25 - 26 PLY TIRES				O R P A R A T I N F T.
	STATIONARY		PICK & CARRY BOOM CENTERED OVER FRONT		
	±6° ARC OVER FRONT	360° ARC	CREEP	2 1/2 MPH	
10	66900	42200	56200	39100	10
12	57500	35200	48500	33300	12
15	47100	24800	39800	26900	15
20	29600	14800	29600	19700	20
25	19300	9500	19300	14900	25
30	13600	6300	13600	11500	30
35	9900	4200	9900	8900	35
40	7300	2600	7300	6900	40
45	5400	1500	5400	5300	45
50	4000		4000	4000	50
55	2800		2800	2800	55
60	1900		1900	1900	60

(3232U40)

CHART 7

LOAD RATINGS IN POUNDS					
O R P A R A T I N F T.	29.5 x 25 - 28 PLY TIRES				O R P A R A T I N F T.
	STATIONARY		PICK & CARRY BOOM CENTERED OVER FRONT		
	±6° ARC OVER FRONT	360° ARC	CREEP	2 1/2 MPH	
10	74100	34100	72600	54800	10
12	63900	28700	62900	47200	12
15	52500	22700	52100	38700	15
20	29600	14800	29600	29200	20
25	19300	9500	19300	19300	25
30	13600	8300	13600	13600	30
35	9900	4200	9900	9900	35
40	7300	2600	7300	7300	40
45	5400	1500	5400	5400	45
50	4000		4000	4000	50
55	2800		2800	2800	55
60	1900		1900	1900	60

(3232U42)

CHART 8

DEDUCTIONS TO BE MADE FROM LOAD RATINGS IN POUNDS					
HOOK BLOCK		HOOK BLOCK ON POWERED BOOM POINT			
		8.5-20 TON	50 TON	8.5-20 TON W/AUX. SHEAVE	50 TON W/AUX. SHEAVE
HOOK BLOCK WEIGHT		580	950	740	1100
STOWED LATTICE EXT.	35 FT. BOOM EXTENSION	900	1300	1100	1400
	60 FT. TELESCOPIC BOOM EXTENSION	1100	1400	1200	1600

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

INFORMATION

1. Deductions must be made from rated loads for stowed lattice extension, optional attachments, hooks and hook blocks, (See Deduction Chart no. 8). Weights of slings and all other load handling devices shall be considered part of the load.
2. Ratings above the heavy lines 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.

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 houselock engaged.
3. Crane load ratings on tires apply only when rear axle lockouts are engaged when swinging 360°.
4. Lift loads with minimum boom length; do not exceed 75 feet boom length when lifting on tires.
5. Do not attempt lifts on tires with extension erected.
6. Maximum recommended boom angle on tires is 66° without load.

CHART 9

TIRE SIZE	TIRE INFLATION		
	STATIC & CREEP	2 1/2 MPH	TRAVEL
26.5 X 25-26 PR	80 PSI	65 PSI	55 PSI
29.5 X 25-28 PR	75 PSI	65 PSI	55 PSI

DEFINITION:

Creep is motion for less than 200 feet in a 30 minute period and not exceeding 1 mph.

CHART 10

DEDUCTIONS TO BE MADE FROM LOAD RATINGS IN POUNDS							
DESCRIPTION		WITHOUT HOOK BLOCK ON BOOM POINT	HOOK BLOCK ON POWERED BOOM POINT				
			8.5 - 20 TON	50 TON	8.5 - 20 TON WITH AUXILIARY SHEAVE	50 TON WITH AUXILIARY SHEAVE	
HOISTING LOAD FROM POWERED BOOM	HOOK BLOCK WEIGHT		580	950	740	1100	
	35 FT. LATTICE EXTENSION	Stowed	600	1000	750	1150	
		Erected only	3650	4000	3800	4150	
		8.5 - 15 ton Ball 20 ton Block	4850 6200	5200 6600	5000 6400	5350 6750	
35 - 60 FT. LATTICE EXTENSION	Stowed	600	950	750	1100		
	Erected only	5650	6000	5800	6200		
	8.5 - 15 ton Ball 20 ton Block	6850 8250	7250 8600	7000 8400	7400 8750		
60 FT. LATTICE EXTENSION	Erected only	5650	6000	5800	6200		
	8.5 - 15 ton Ball	7300	7700	7500	7850		
	20 ton Block	9250	9600	9400	9750		
HOISTING LOAD FROM EXTENSION	35 FT. LATTICE EXTENSION	8.5 - 15 ton Ball	270	650	850	750	950
		20 ton Block	580	950	1150	1050	1250
	35 - 60 FT. LATTICE EXTENSION	8.5 - 15 ton Ball	270	650	900	750	950
20 ton Block		580	950	1200	1050	1300	
60 FT. LATTICE EXTENSION	8.5 - 15 ton Ball	270	600	750	650	850	
	20 ton Block	580	900	1100	1000	1150	

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

(3232R25)

CHART 11

MAIN HOIST REEVING										
3/4" DIA. WIRE ROPE BREAKING STRENGTH 58,800 LBS - 6 X 37 FW IWRC										
PART OF LINE	1	2	3	4	5	6	7	8	9	10
MAXIMUM LOAD	11000	22000	33000	44000	55000	66000	77000	88000	99000	100000

AUXILIARY HOIST REEVING										
3/4" DIA. WIRE ROPE BREAKING STRENGTH 51,800 LBS. 8 X 19 IWRC SPIN RESISTANT										
PART OF LINE	1	2	3	4	5	6	7	8	9	10
MAXIMUM LOAD	10000	20000	30000	40000	50000	60000	70000	80000	90000	100000

(3232R25)

Information:

- Crane load ratings on outriggers do not exceed 85% of tipping.
- Ratings above the heavy line are based on the machine's hydraulic or structural competence and not on machine stability.
- Deductions must be made from rated loads for stowed lattice extensions, optional attachments, hooks and hook blocks (see deductions chart above). Weights of slings and all other load handling devices 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 9 3/4 inches from the longitudinal axis of the carrier to the outrigger float pivot connection with all load removed from the carrier wheels.
- Counterweight 9000 lbs., none removable.

Warnings:

- Loaded boom angles at specified boom lengths give only an approximation of the operating radius. The boom angle before loading should be greater to account for deflections. Do not exceed the operating radius for rated loads.
- Positioning or operation of powered boom lengths at radii beyond the maximums or minimums shown, is not intended or approved.

Warnings cont.

- Positioning or operation of lattice extensions at boom angles beyond the maximums or minimums shown, is not intended or approved.
- For powered boom lengths not shown, use ratings of next longer powered boom. For load radii not shown, use rating of next longer radius.
- Crane load ratings on outriggers are based on freely suspended loads with the machine levelled and standing on a firm uniform supporting surface. No attempt shall be made to move a load horizontally on the ground in any direction.
- 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.
- The maximum load which may be telescoped is limited by hydraulic pressure, boom angle, and powered boom lubrication. It is safe to attempt to telescope any load within the limits of the load rating chart.
- When lifting a load, all sections of the powered boom must be equally extended within one foot.