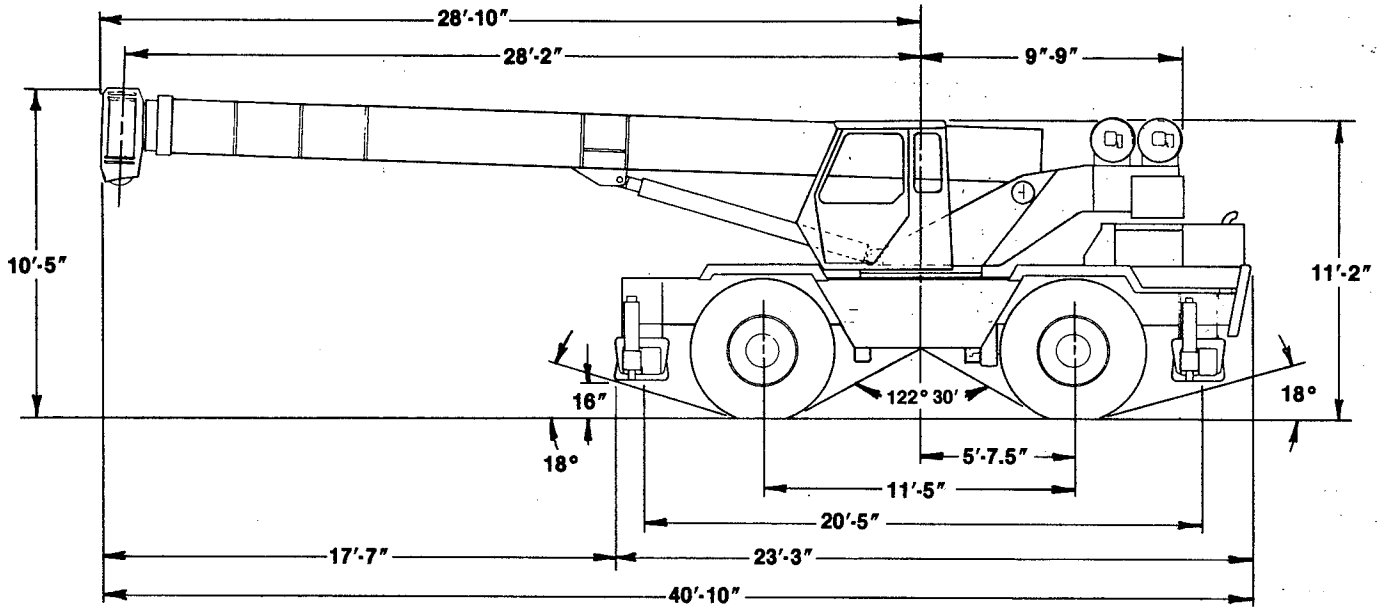
KOEHRING®

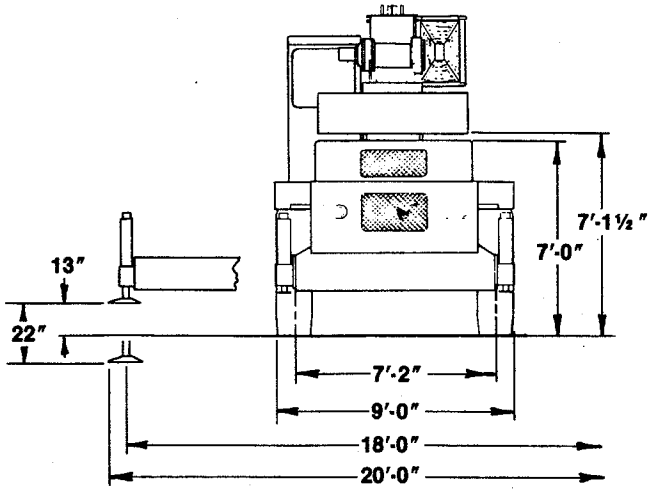
LORAIN® LRT 330

general specifications
hydraulic rough terrain crane — 33 ton capacity

General Dimensions

Note: Dimensions given assume boom is fully retracted in travel position and crane is equipped with standard tires.





Operating Weight

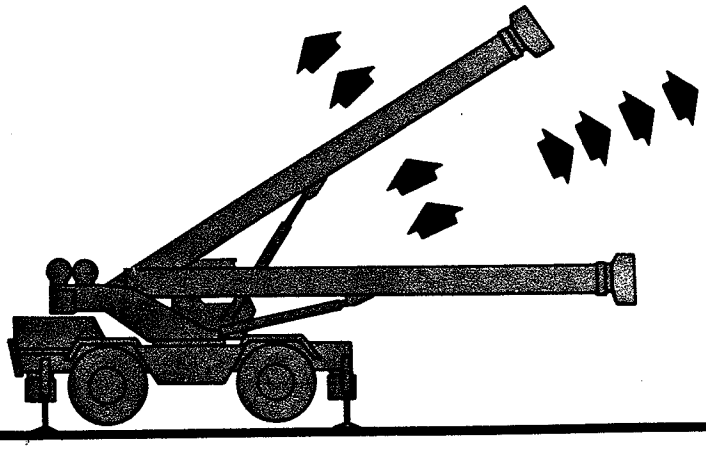
WEIGHT

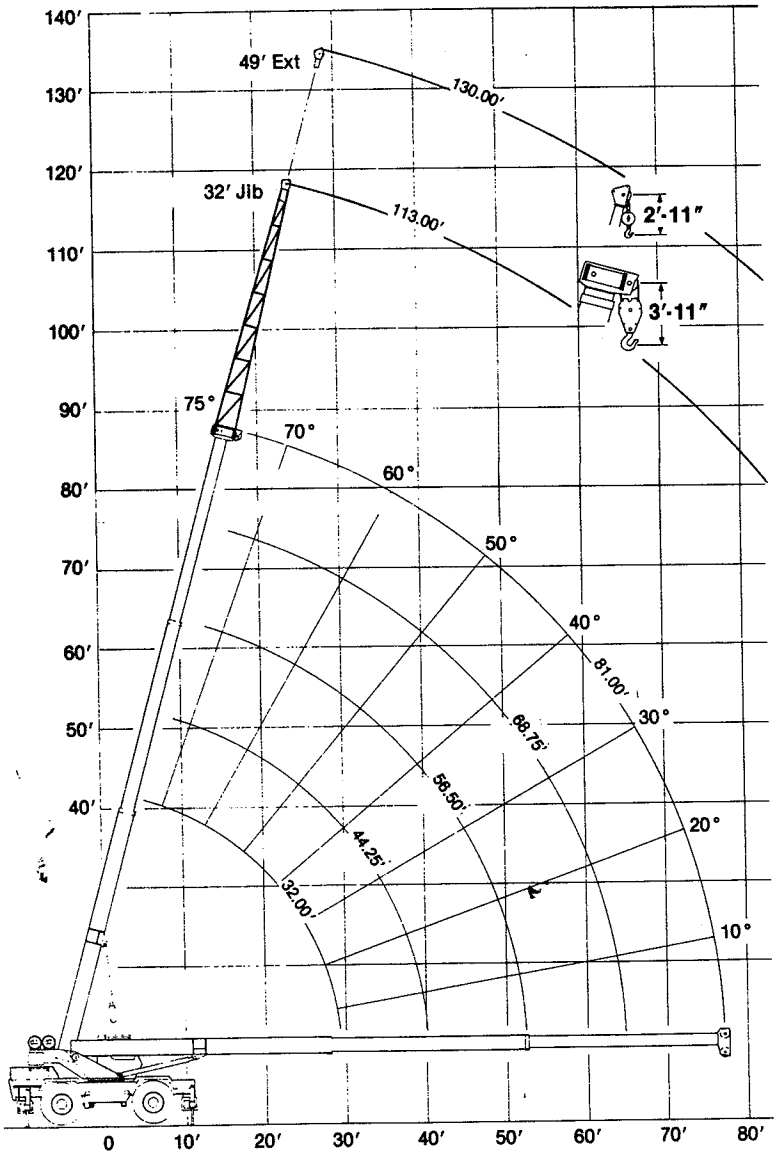
55,950 lbs with 81′ boom, main winch only and 4,300 lb. counterweight.

WEIGHT DISTRIBUTION

	Front lbs	Rear lbs	Total lbs
Standard Machine	29,610	26,340	55,950
Add: 32′ Jib	+ 1,520	− 620	+ 900
Add: 49′ Jib	+ 1,660	− 460	+ 1,200
Add: Auxiliary Winch	− 10	+ 110	+ 100
Add: 23:50 x 25 Tires	+ 210	+ 210	+ 420

Range Diagram

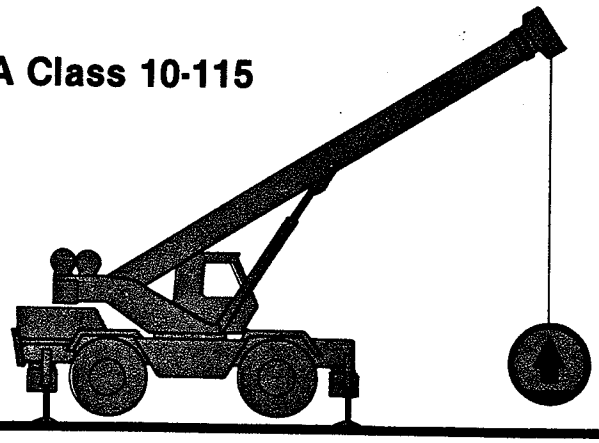




GENERAL AND SPECIFIC CAPACITY CONDITIONS AND LIMITATIONS

1. The rated loads as determined by boom length, radius or boom angle pertain to this crane as originally manufactured and equipped. They are maximum load ratings.
2. Crane load ratings are based on freely suspended loads with the machine leveled and standing on a firm, uniform, supporting surface. Practical working loads require the USER to make due allowances for the particular job conditions dependent upon supporting surface, wind, pendulum action of load, jerking or sudden stopping of loads, hazardous surroundings, experience of personnel, etc. Positioning of, or operation at, radii and boom or jib length beyond the maximum and minimum shown is not intended or approved. For boom lengths not shown, use load ratings of next longer boom. **SIDE PULL ON BOOM IS EXTREMELY DANGEROUS.**
3. Weight of hooks, hook blocks, slings and all other load handling devices, except hoist rope, shall be included as part of the load.
4. Chart ratings shown above the bold line or as specified are based on the machine's structural strength and not on the machine's stability. All other ratings are based on stability and do not exceed the specified percentage of tipping load.
5. CRANE LOAD RATINGS ON OUTRIGGERS ARE BASED ON OUTRIGGERS ALL BEING FULLY EXTENDED AND SET ON A FIRM SUPPORTING SURFACE TO PROVIDE FOR A LEVEL MACHINE.
6. This crane and rated loads shown are in accordance with standards of Power Crane And Shovel Association Standard No. 2 and SAE Crane Load Stability Test Code J-765.
7. The operator and other personnel should read and fully understand the Operator's Manual furnished by the manufacturer before operating this machine and rules for safe operation of equipment should be adhered to at all times. Operators and supervisors must fully understand safety standards for mobile hydraulic cranes ANSI B30.15 and be familiar with Federal, State and Local Safety Regulations.
8. The maximum load which may be telescoped is limited by boom angle, hydraulic pressure, boom lubrication, etc. When extending boom with load, do not exceed load rating at longest boom length required.
9. For clamshell, magnet, or concrete bucket operation, weight of bucket or magnet and load must not exceed 90% of load rating chart capacities.

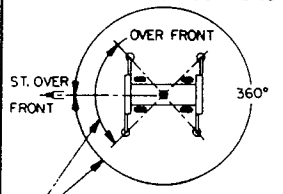
Load Ratings
33 Ton Capacity — PCSA Class 10-115
Stability 85%



ON OUTRIGGERS OVER FRONT

RADIUS	ANGLE	BOOM LENGTH 32.00' Retracted	ANGLE	BOOM LENGTH 44.25'	ANGLE	BOOM LENGTH 56.50'	ANGLE	BOOM LENGTH 68.75'	ANGLE	BOOM LENGTH 81.00' Extended	RADIUS
10	65°	66,000	73°	51,100							10
12	61°	55,000	70°	47,200	75°	36,600					12
15	55°	49,500	65°	43,000	72°	34,200	75°	26,000			15
20	43°	35,400	58°	35,900	66°	27,000	71°	21,500	75°	20,000	20
25	27°	26,900	50°	27,400	61°	23,400	66°	18,200	72°	17,200	25
30			41°	21,800	55°	20,600	62°	15,400	67°	14,800	30
35			30°	17,700	48°	17,900	57°	13,600	63°	12,500	35
40			9°	14,600	40°	15,000	52°	12,100	59°	11,250	40
50					19°	10,200	40°	9,750	50°	9,000	50
60							24°	7,300	40°	7,400	60
70									26°	6,150	70
75									16°	5,300	75

CRANE WORKING POSITIONS



THESE LINES DETERMINE THE LIMITS OF WORKING POSITIONS WHICH CORRESPOND TO THOSE SHOWN ON THE CRANE CAPACITY CHARTS.

ON TIRES ST. OVER FRONT

RADIUS	MAX. ANGLE	MIN. ANGLE	ALL BOOM LENGTHS	RADIUS
10	75°	67°	50,200	10
12	75°	63°	41,500	12
15	75°	57°	30,700	15
20	75°	45°	20,500	20
25	75°	29°	14,700	25
30	74°	0°	10,500	30
35	69°	0°	8,050	35
40	61°	0°	6,250	40
50	52°	0°	3,950	50
60	41°	0°	2,550	60
70	27°	0°	1,600	70

ON OUTRIGGERS 360°

RADIUS	ANGLE	BOOM LENGTH 32.00' Retracted	ANGLE	BOOM LENGTH 44.25'	ANGLE	BOOM LENGTH 56.50'	ANGLE	BOOM LENGTH 68.75'	ANGLE	BOOM LENGTH 81.00' Extended	RADIUS
10	65°	66,000	73°	51,100							10
12	61°	55,000	70°	47,200	75°	36,600					12
15	55°	45,200	65°	43,000	72°	34,200	75°	26,000			15
20	43°	32,200	58°	32,700	66°	27,000	71°	21,500	75°	20,000	20
25	27°	24,400	50°	24,900	61°	23,400	66°	18,250	72°	17,200	25
30			41°	18,900	55°	19,300	62°	15,400	67°	14,800	30
35			30°	14,300	48°	14,700	57°	13,600	63°	12,500	35
40			9°	11,100	40°	11,500	52°	11,700	59°	11,250	40
50					19°	7,500	40°	7,700	50°	7,900	50
60							24°	5,150	40°	5,300	60
70									26°	3,800	70
75									16°	3,100	75
85											85
95											95
105											105
115											115

SIDE STOW JIB

ANGLE	MAX. BOOM & 32' JIB	ANGLE	MAX. BOOM & 49' JIB	RADIUS
				10
				12
				15
				20
				25
75°	9,400			30
72°	9,000	75°	5,300	35
70°	8,700	73°	4,900	40
64°	7,700	69°	4,300	50
58°	5,500	63°	3,900	60
52°	4,000	58°	3,400	70
47°	3,400	55°	3,200	75
44°	2,400	50°	2,900	85
31°	1,650	44°	2,200	95
20°	1,050	37°	1,600	105
		28°	1,100	115

ON TIRES 360°

RADIUS	MAX. ANGLE	MIN. ANGLE	ALL BOOM LENGTHS	RADIUS
10	75°	67°	26,900	10
12	75°	63°	22,600	12
15	75°	57°	14,100	15
20	75°	45°	9,750	20
25	75°	29°	6,500	25
30	74°	0°	4,200	30
35	69°	0°	2,850	35
40	61°	0°	1,950	40

MAXIMUM PERMISSIBLE LOAD IN LBS

Line Parts	1	2	3	4	5	6	7
Main Hoist	9,500	19,000	28,500	38,000	47,500	57,000	66,000
Aux. Hoist	5,000	10,000	15,000	20,000	25,000	30,000	35,000
Boom Head	2	2-D	2-3	1-2-D	1-2-3	1-2-3-D	1-2-3-4
Hook Block	D	2	2-D	1-2	1-2-D	1-2-3	1-2-3-D

Main Hoist Line - 5/8" Dia. 6x19 IWRC, IPS, Reg. Lay Preformed Wire Rope.
Minimum Breaking Strength - 17.9 Tons.
Max. Permissible Line Pull - 10,228 Lbs.

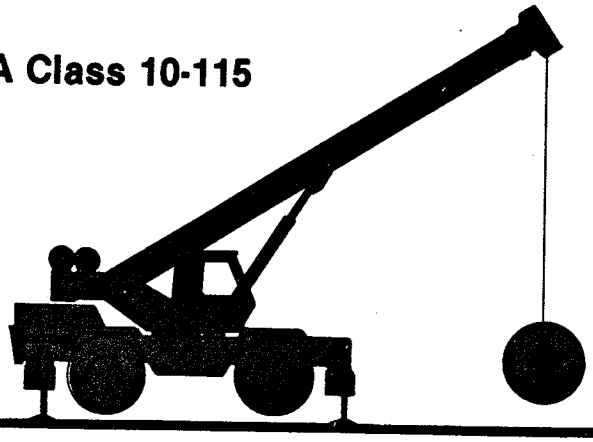
Aux. Hoist Line - 1/2" Dia. 6x19 IWRC, IPS, Preformed Wire Rope.
Minimum Breaking Strength - 11.5 Tons.
Max. Permissible Line Pull - 5,265 Lbs.

1. For boom lengths less than maximum with the side stow jib erected, the rated loads are determined by boom angle only in the appropriate jib plus boom column. For boom angles not shown, use the capacity of the next lower boom angle.
2. When lifting off main boom head and jib is erected, deduct 1800 lbs. for side stow jib from main boom load chart capacities.

CAUTION

Without outriggers, never maneuver boom beyond 70' radius over front or 40' radius over side to ensure stability.

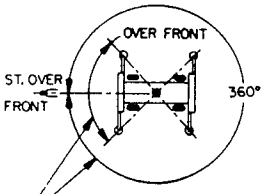
Load Ratings
33 Ton Capacity — PCSA Class 10-115
Stability 85%



ON OUTRIGGERS OVER FRONT

RADIUS	ANGLE	BOOM LENGTH 32.00' Retracted	ANGLE	BOOM LENGTH 44.25'	ANGLE	BOOM LENGTH 56.50'	ANGLE	BOOM LENGTH 68.75'	ANGLE	BOOM LENGTH 81.00' Extended	RADIUS
10	65°	66,000	73°	51,100							10
12	61°	55,000	70°	47,200	75°	36,600					12
15	55°	49,500	65°	43,000	72°	34,200	75°	26,000			15
20	43°	35,400	58°	35,900	66°	27,000	71°	21,500	75°	20,000	20
25	27°	26,900	50°	27,400	61°	23,400	66°	18,200	72°	17,200	25
30			41°	21,800	55°	20,600	62°	15,400	67°	14,800	30
35			30°	17,700	48°	17,900	57°	13,600	63°	12,500	35
40			9°	14,600	40°	15,000	52°	12,100	59°	11,250	40
50					19°	10,200	40°	9,750	50°	9,000	50
60							24°	7,300	40°	7,400	60
70									26°	6,150	70
75									16°	5,300	75

CRANE WORKING POSITIONS



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ON TIRES ST. OVER FRONT

RADIUS	MAX. ANGLE	MIN. ANGLE	ALL BOOM LENGTHS	RADIUS
10	75°	67°	50,200	10
12	75°	63°	41,500	12
15	75°	57°	30,700	15
20	75°	45°	20,500	20
25	75°	29°	14,700	25
30	74°	0°	10,500	30
35	69°	0°	8,050	35
40	61°	0°	6,250	40
50	52°	0°	3,950	50
60	41°	0°	2,550	60
70	27°	0°	1,600	70

ON OUTRIGGERS 360°

RADIUS	ANGLE	BOOM LENGTH 32.00' Retracted	ANGLE	BOOM LENGTH 44.25'	ANGLE	BOOM LENGTH 56.50'	ANGLE	BOOM LENGTH 68.75'	ANGLE	BOOM LENGTH 81.00' Extended	RADIUS
10	65°	66,000	73°	51,100							10
12	61°	55,000	70°	47,200	75°	36,600					12
15	55°	45,200	65°	43,000	72°	34,200	75°	26,000			15
20	43°	32,200	58°	32,700	66°	27,000	71°	21,500	75°	20,000	20
25	27°	24,400	50°	24,900	61°	23,400	66°	18,250	72°	17,200	25
30			41°	18,900	55°	19,300	62°	15,400	67°	14,800	30
35			30°	14,300	48°	14,700	57°	13,600	63°	12,500	35
40			9°	11,100	40°	11,500	52°	11,700	59°	11,250	40
50					19°	7,500	40°	7,700	50°	7,900	50
60							24°	5,150	40°	5,300	60
70									26°	3,800	70
75									16°	3,100	75
85											85
95											95
105											105
115											115

SIDE STOW JIB

ANGLE	MAX. BOOM & 32' JIB	ANGLE	MAX. BOOM & 49' JIB	RADIUS
				10
				12
				15
				20
				25
75°	9,400			30
72°	9,000	75°	5,300	35
70°	8,700	73°	4,900	40
64°	7,700	69°	4,300	50
58°	5,500	63°	3,900	60
52°	4,000	58°	3,400	70
47°	3,400	55°	3,200	75
44°	2,400	50°	2,900	85
31°	1,650	44°	2,200	95
20°	1,050	37°	1,600	105
		28°	1,100	115

ON TIRES 360°

RADIUS	MAX. ANGLE	MIN. ANGLE	ALL BOOM LENGTHS	RADIUS
10	75°	67°	26,900	10
12	75°	63°	22,600	12
15	75°	57°	14,100	15
20	75°	45°	9,750	20
25	75°	29°	6,500	25
30	74°	0°	4,200	30
35	69°	0°	2,850	35
40	61°	0°	1,950	40

MAXIMUM PERMISSIBLE LOAD IN LBS

Line Parts	1	2	3	4	5	6	7
Main Hoist	9,500	19,000	28,500	38,000	47,500	57,000	66,000
Aux. Hoist	5,000	10,000	15,000	20,000	25,000	30,000	35,000
Boom Head	2	2-D	2-3	1-2-D	1-2-3	1-2-3-D	1-2-3-4
Hook Block	D	2	2-D	1-2	1-2-D	1-2-3	1-2-3-D

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