

LORAIN LRT 275
LOAD CHARTS

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LORAIN LRT 275

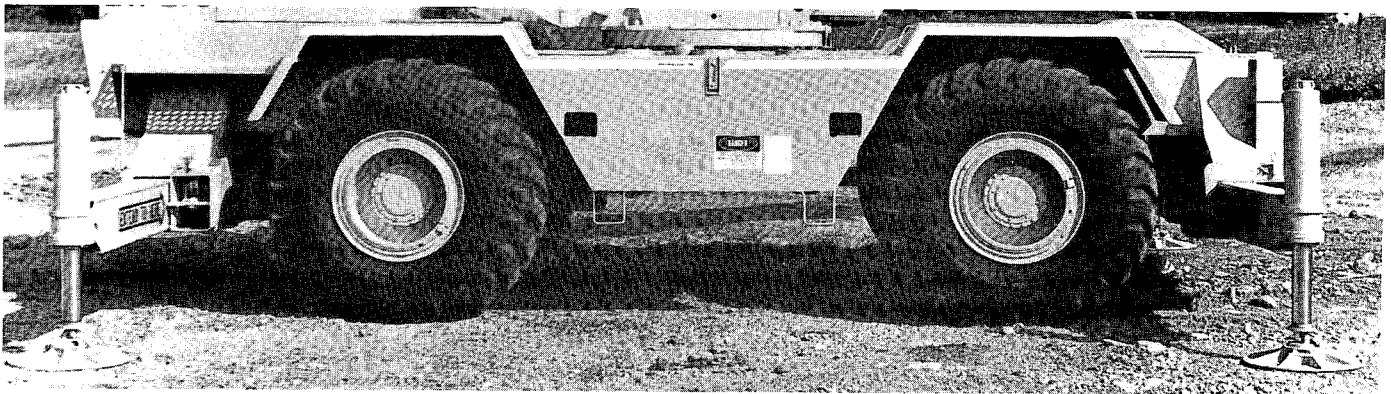
general

The Lorain Model LRT 275 hydraulic rough terrain crane has a rated lift capacity of 27-1/2 tons (25 metric tons).

It is equipped with a three-section, full power, self-proportioning hydraulic boom that extends from 32 to 81 feet (9.8 to 24.7 m), and a two-speed hydraulic main winch.

An optional 32 foot (9.8 m) lattice jib with a 17 foot (5.2 m) extendable tip section is available. The fully-extended boom/jib combination provides a maximum reach of 130 feet (39.6 m).

Other optional equipment for the superstructure includes: an equal speed hydraulic auxiliary winch, an auxiliary boom head sheave attachment, and drum rotation indicators for the main and auxiliary winches.



Carrier — Highly maneuverable 4x4 chassis with deep ratioed 6-speed full reversing Powershift transmission for rough terrain job site travel. Heavy duty drive/steer planetary axles, front axle rigidly mounted and rear axle pivotally supported and equipped with automatic rear axle oscillation lockout to provide maximum stability in pick and carry and on-rubber lifts. Operator convenience

is provided by access steps and non-skid surfaces on fenders and main deck. To meet your job conditions exactly, there's a choice of three (3) tire sizes.

Frame — Heavy-duty construction with reinforcing plates at top and bottom. Gives greater resistance to torsional stresses encountered while lifting or traveling.

Power Unit

TYPE	DETROIT DIESEL 6V-53N
BORE & STROKE	6 CYLINDER 3.875 in. x 4.5 in. (98.4 mm x 114.3 mm)
DISPLACEMENT	318 cu. in. (5.2 litre)
MAX. GROSS H.P.	200 hp (149 kW) @ 2600 rpm
MAX. GROSS TORQUE	446 lbs. ft. (605 N·m) @ 1500 rpm
NET POWER	180 hp (134 kW) @ 2600 rpm
AIR FILTER	DRY TYPE
ELECTRICAL SYSTEM	12V — 62 Amp Alternator
BATTERY	(2) 12V, 1575 cold cranking Amps @ 0° F (-18° C)
COOLING SYSTEM	12 gal. (45.4 litre)
FUEL CAPACITY	60 gal. (227.1 litre)
CRANKCASE CAPACITY	22 qt. (20.8 litre)

Transmission/Torque Converter

Type — Remote-mounted Clark Model R-28620 Powershift, 6-speed, full reversing. 4-Wheel drive with rear axle disconnect.

Converter — Engine-mounted Clark Model C272.5 offers smooth acceleration. Stall Torque Ratio: 1.82 to 1.

Shift Control — Electric solenoid-operated. Air-operated range shift, forward/reverse.

Parking Brakes — Front and rear axles equipped with spring-set, air-released emergency/parking chambers.

Wheels, Axles, Suspension and Steering

Tires: 18.00 x 25, 20 P.R., Standard
23.50 x 25, 20 P.R., Optional
26.50 x 25, 20 P.R., Optional

Wheelbase — 137 in. (3480 mm)

Wheels — Disc-type with full tapered bead seat rim.

Axles — Two drive/steer planetary axles. Rockwell Standard, PS-250 Series.

Service Brakes — Cam-operated air brakes on all four wheels. Dimensions—20-1/4 in. x 4 in. (514.4 mm x 102 mm).

Suspension — Rigid mount at front; center-pivot at rear with automatic axle lockout.

Drive Mode — 4 x 4 crane carrier.

Steering — Four-wheel Orbitrol power steering with dual cylinders on each axle. Three mode steering selection; 2-wheel, 4-wheel and crab. All steering is wheel controlled.

Turning Radius — 2-Wheel Steer 35'-0" (10.66 m)
4-Wheel Steer 20'-3" (6.17 m)

Performance

Road Speeds and Tractive Effort: Based on 18.00 x 25 Tires

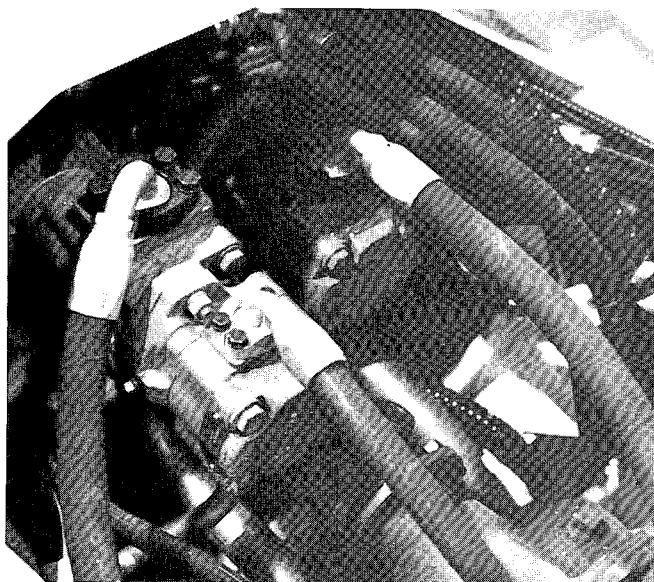
Range	Gear	Maximum Speed	Maximum Drawbar Pull
Low	1st	2.1 mph (3.4 km/h)	
	2nd	3.9 mph (6.3 km/h)	48,450 lbs.
	3rd	10.3 mph (16.6 km/h)	(21 977 kg)
High	1st	4.9 mph (7.9 km/h)	
	2nd	9.0 mph (14.5 km/h)	20,350 lbs.
	3rd	22.9 mph (36.9 km/h)	(9231 kg)

Gradeability — 67% based on 56,000 lb. (25 401 kg) gross vehicle weight at 1.0 mph (1.6 Km/h).

Gradeability is a measure of the tractive effort only and does not represent grades on which the machine can operate. Stability and the engine's lubrication system are factors to be considered.

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superstructure machinery



Hydraulic System

Hydraulic Pump Drive — Three crane function pumps, one single and one tandem with piggyback for outriggers. Direct mounted on torque converter housing with air-shifted disconnect. Five independent circuits utilizing triple gear divider in revolving superstructure. Separate vane-type power steering pump, direct driven from engine. Combined system capacity: 159.5 gpm (604 litre/min).

Hydraulic Pumps:

Main & Auxiliary Winch Pump — 65 gpm (246 litre/min) @ 2737 rpm operating at 2750 psi (18 960 kPa).

Swing, Boom Telescope, Boom Hoist Pump — 65 gpm (246 litre/min) @ 2737 rpm operating at 2750 psi (18 960 kPa).

Swing Circuit — 18 gpm (68.14 litre/min) operating at 2000 psi (13 790 kPa).

Boom Extend Circuit — 18 and 47 gpm (68.14 and 178 litre/min) operating at 2750 psi (18 960 kPa). Two speed telescope action with boost from hoist circuit.

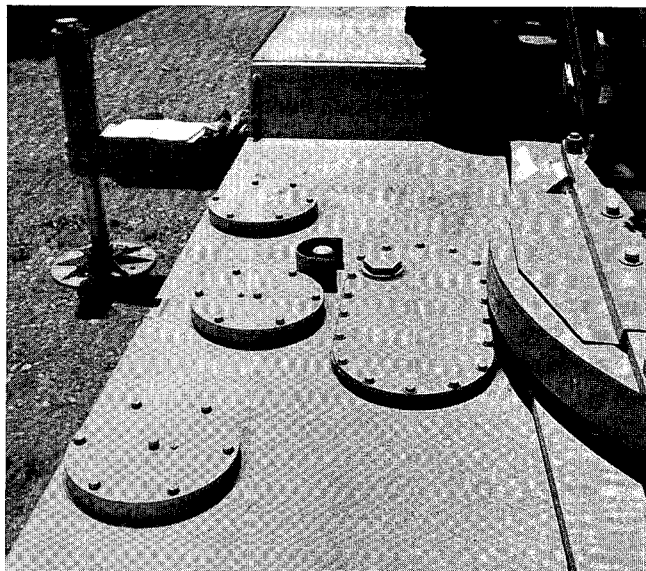
Boom Hoist Circuit — 29 and 47 gpm (110 and 178 litre/min) operating at 2750 psi (18 960 kPa). Two speed hoist action with boost from telescope circuit.

Outrigger and Power Steering Pump — 21.5 gpm (81.5 litre/min) @ 2737 rpm operating at 1500 psi (10 342 kPa).

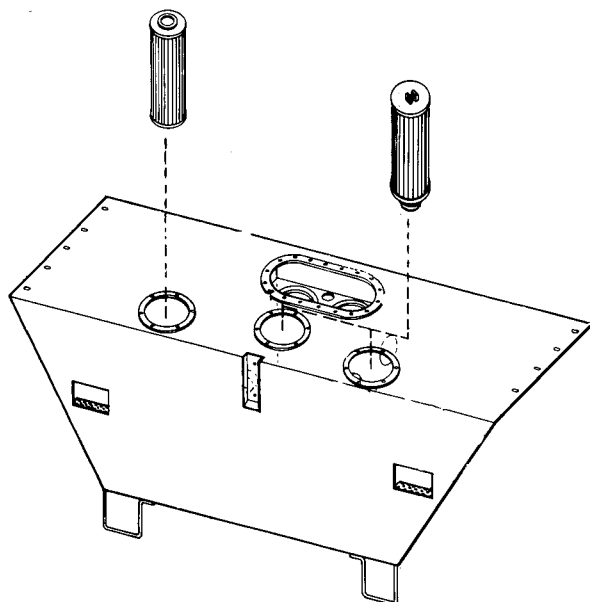
Power Steering Pump — 8 gpm (30.3 litre/min) @ 2600 rpm operating at 2000 psi (13 789 kPa).

Emergency Steer Pump — 3.6 gpm (13.6 litre/min) @ 750 psi (5171 kPa).

Hydraulic Control Valves — One 5-spool valve for boom hoist, swing and telescope; one 2-spool stack valve for winches. Mounted at rear of superstructure on semi-isolation pads.



Hydraulic Oil Reservoir — 130 gal. (492.1 litre) capacity oil reservoir keeps the system supplied with plenty of clean filtered oil, no matter what the working demands. Hydraulic oil level sight gauge is located on the reservoir for quick inspection.



Oil Filtration — Full flow system with 100 mesh (140 micron) suction strainer and twin 10 micron replaceable element return filters. Complete bypass protection.

Oil Cooler — For high cycle hoist operations, an optional cooler is available.

CYLINDERS	BORE	STROKE
Boom Hoist (2):	7.25 in. (184.2 mm)	90 in. (2286 mm)
Boom Telescope (2):	5.25 in. (133.4 mm)	294 in. (7468 mm)
Outrigger Beam (4):	2.5 in. (63.5 mm)	58.5 in. (1486 mm)
Outrigger Jack (4):	6 in. (152.4 mm)	22 in. (559 mm)
Steering (4):	3.5 in. (88.9 mm)	8 in. (203 mm)

Pilot check valves on all load holding cylinders.

Cylinder Cycle Times (in seconds):

FUNCTION	SECONDS
Boom Hoist	41
Boom Lower	30
Boom Extend	75
Boom Retract	75
Outrigger Set	44
Outrigger Retract	26

Swing Speed (no load) — 2.4 rpm

Operation — Double planetary reduction unit powered by a hydraulic motor.

Swing Bearing — Single row, ball-type, with hardened internal teeth. Base is bolted to revolving superstructure and to carrier frame.

Swing Brake — Heavy-duty, disc-type brake mechanically actuated from operator's cab by foot pedal or locking lever. Brake locks upper machinery at any degree of rotation.

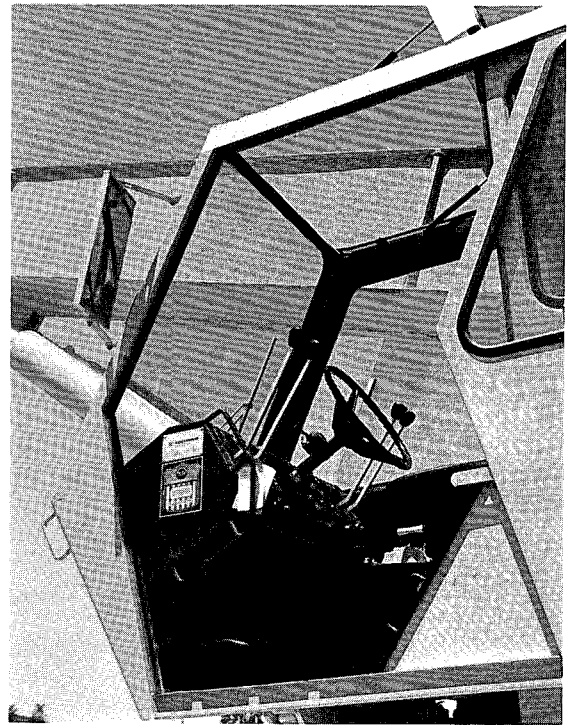
Swing Lock — Superstructure is held securely for roading by a sector gear-type lock.



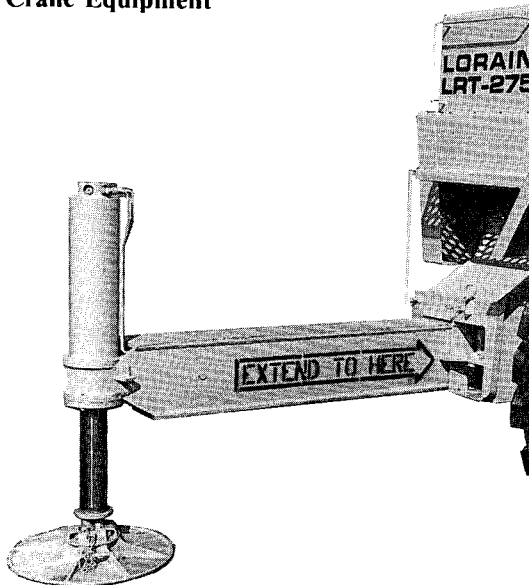
LORAIN LRT 275



New-style environmental cab revolves with crane superstructure. Fully sound-proofed and isolation-mounted for lower noise levels. Deluxe 6-way adjustable seat with arm rests, headrest, and torsion suspension. Push/pull function control cables. Boom hoist pedals. Foot and hand swing brake control. Master switch outrigger controls, in and out . . . up and down. Accidental outrigger actuation is reduced because of sequence control arrangement. Full-vision skylight window on roof, tinted to reduce glare. Front window is removable for utmost visibility. Roof window opens and right-hand window slides to provide ventilation. Entry to and exit from cab made easy by conveniently located access steps.



Additional Crane Equipment



Hydraulic Out-And-Down Outriggers — Double beam type. Box integrally welded to frame. 18 ft. (5.5 m) spread, centerline to centerline of vertical cylinders. 21 ft. (6.4 m) spread, front to rear. 24" (609.6 mm) dia. aluminum floats.

Rotary Manifold — With ample outlets for air and hydraulic hose connections between revolving superstructure and carrier.

Collector Ring Assembly — For Electrical system components.

Additional Optional Crane Equipment

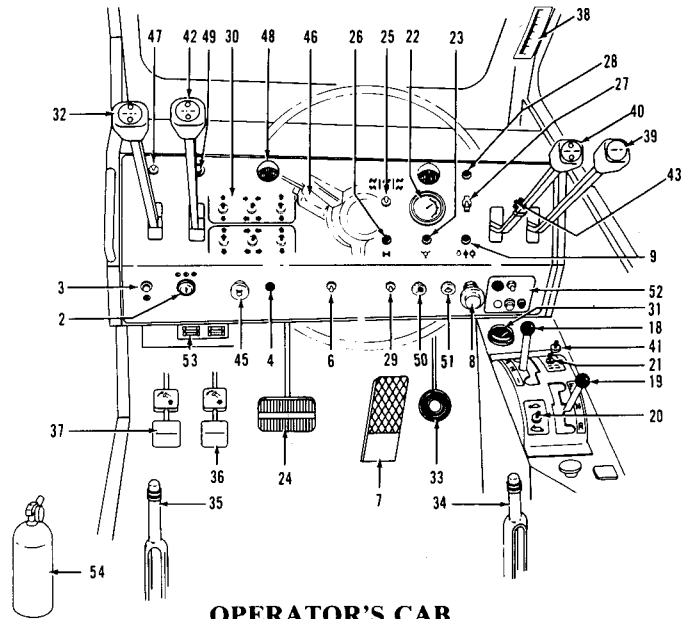
Immersion heater for hydraulic oil reservoir. No-spin differential (rear axle), pintle hook (front and/or rear), back-up alarm, three-sheave 30-ton (27.2 metric ton) hook block with safety latch, 5-ton (4.5 metric ton) weighted hook and ball.



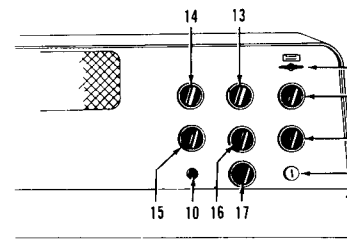
Cab Controls and Instruments

CONTROL AND INSTRUMENT KEY

- 1 IGNITION SWITCH (Lower Dash — Start Only)
- 2 IGNITION SWITCH (Upper Dash)
- 3 ENGINE STOP
- 4 ENGINE EMERGENCY STOP (On Some Models)
- 5 COLD STARTING AID ("Quick Start")
- 6 PUMP DISCONNECT
- 7 ACCELERATOR
- 8 GOVERNOR (Hand Throttle)
- 9 INSTRUMENT WARNING LIGHT
- 10 LOW COOLANT WARNING LIGHT
- 11 OIL PRESSURE GAUGE
- 12 FUEL GAUGE
- 13 ENGINE TEMPERATURE GAUGE
- 14 HOUR METER
- 15 VOLTMETER
- 16 TRANSMISSION TEMPERATURE GAUGE
- 17 TRANSMISSION OIL PRESSURE GAUGE
- 18 TRANSMISSION SHIFT LEVER
- 19 TRANSMISSION FORWARD-NEUTRAL-REVERSE LEVER
- 20 TRANSMISSION HIGH-LOW RANGE SWITCH
- 21 REAR AXLE DISCONNECT SWITCH
- 22 AIR PRESSURE GAUGE
- 23 LOW AIR WARNING LIGHT & BUZZER
- 24 BRAKE PEDAL
- 25 STEERING MODE SWITCH
- 26 STEERING "CENTER" LIGHT
- 27 AUXILIARY STEERING SWITCH
- 28 AUXILIARY STEERING "ON" LIGHT
- 29 OUTRIGGER MASTER SWITCH
- 30 OUTRIGGER CONTROL SWITCHES
- 31 BUBBLE LEVEL
- 32 SWING LEVER
- 33 SWING BRAKE PEDAL
- 34 SWING BRAKE LEVER
- 35 MECHANICAL SWING LOCK (Optional)
- 36 BOOM LOWER PEDAL
- 37 BOOM RAISE PEDAL
- 38 BOOM ANGLE INDICATOR
- 39 BOOM TELESCOPE LEVER
- 40 MAIN WINCH LEVER
- 41 MAIN WINCH 2-SPEED CONTROL SWITCH
- 42 AUXILIARY WINCH LEVER (Optional)
- 43 WINCH ROTATION INDICATOR(S)
- 44
- 45 LIGHTS
- 46 TURNSIGNALS
- 47 WORK LIGHTS
- 48 DASH LIGHTS
- 49 HORN
- 50 WIPER
- 51 DEFROSTER
- 52 HEATER
- 53 FUSES
- 54 FIRE EXTINGUISHER



OPERATOR'S CAB



INSTRUMENTS ON ENGINE HOUSING

Standard Instruments & Controls — Quick-scan control/instrument panel includes neutral start switch, cold-weather starting aids, outrigger control switches, bubble level, boom angle indicator, hour meter, voltmeter, fuel gauge, engine water temperature gauge, engine oil pressure gauge and warning lights. Other standard items are rear view mirror on left-hand side, laminated safety glass windows, windshield wiper, horn and fire extinguisher.

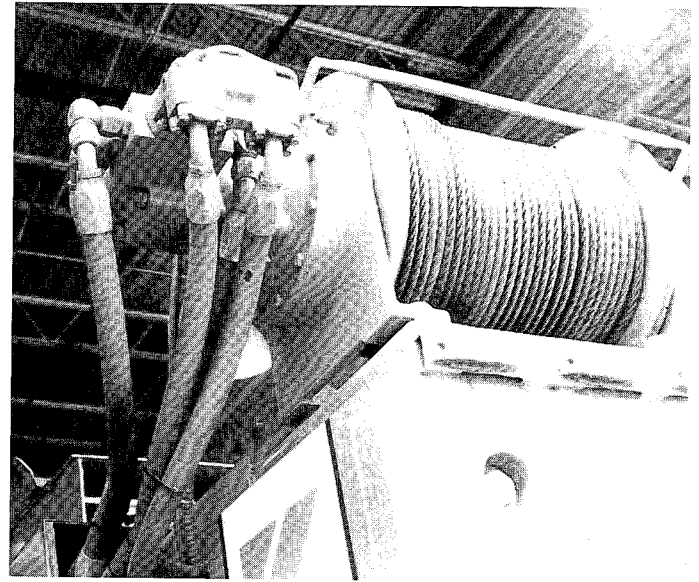
Optional Cab Equipment — Rear view mirror on right-hand side, 20,000 BTU propane heater, 12-volt electrical defroster fan, clear or tinted vandal-proof Lexan glass, winch rotation indicator and floodlights for after dark work.

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Winch

Designed in-house specifically for hydraulic crane applications. Stationary-mounted on crane superstructure.



Main Winch:

Two-Speed

Performance:

Max. line speed (no load) 611 fpm (186.2 m/min)
Max. line pull 13,000 lbs. (5897 kg)

Auxiliary Winch:

Equal Speed

Performance:

Max. line speed (no load) 455 fpm (138.7 m/min)
Max. line pull 6,420 lbs. (2912 kg)

Main Winch Dimensions:

Drum diameter 10-3/4 in. (273 mm)
Drum length 20-7/8 in. (530.2 mm)
Flange diameter 20 in. (508 mm)

Wire Rope:

5/8 in. (15.9 mm) diameter x 500 ft. (152.4 m)
Type: 6 x 19 IWRC IPS.

Drum Capacity:

752' (229 m), 6 layers (Based on minimum flange height above top layer to comply with ANSI B30.15)

Auxiliary Winch Dimensions:

Drum diameter 14-3/4 in. (374.7 mm)
Drum length 20-7/8 in. (530.2 mm)
Flange diameter 19-3/4 in. (501.7 mm)

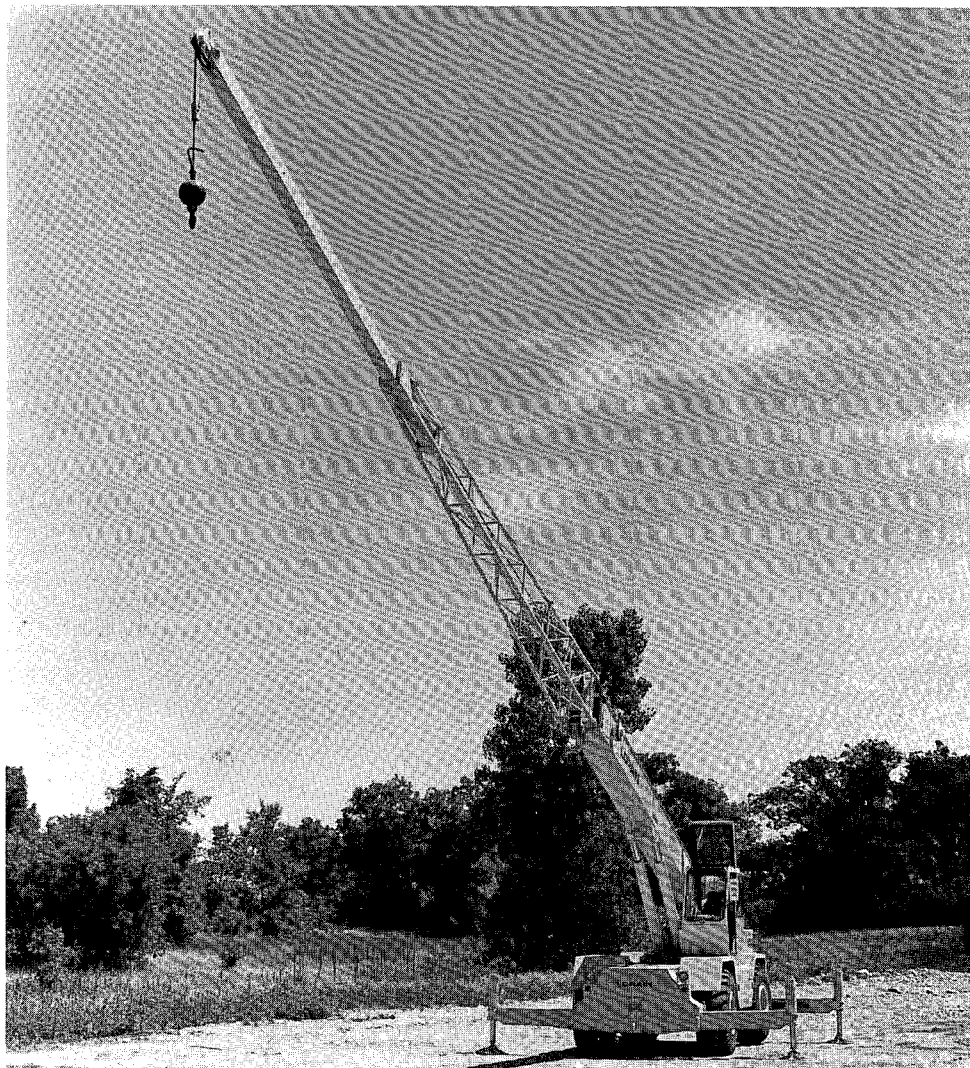
Wire Rope:

1/2 in. (12.7 mm) diameter x 300 ft. (91.4 m)
Type: 6 x 19 IWRC IPS.

Drum Capacity:

732' (223 m), 4 layers (Based on minimum flange height above top layer to comply with ANSI B30.15)

attachment_____



Boom Details

Full Power Hydraulic Boom — Three-section, self-proportioning type. Automatically maintains ideal strength-to-length ratio since telescoping sections extend or retract simultaneously with single lever control. Boom sections supported on anti-friction slide pads that evenly distribute boom loadings and provide smooth telescoping action.

Boom Length — Extends with full power from 32 to 81 feet (9.8 to 24.7 m).

Boom Peak — Quick-reeving boom head and hook block promotes easy line part changes for optimum load handling. Provision made for side-stow jib mounting.

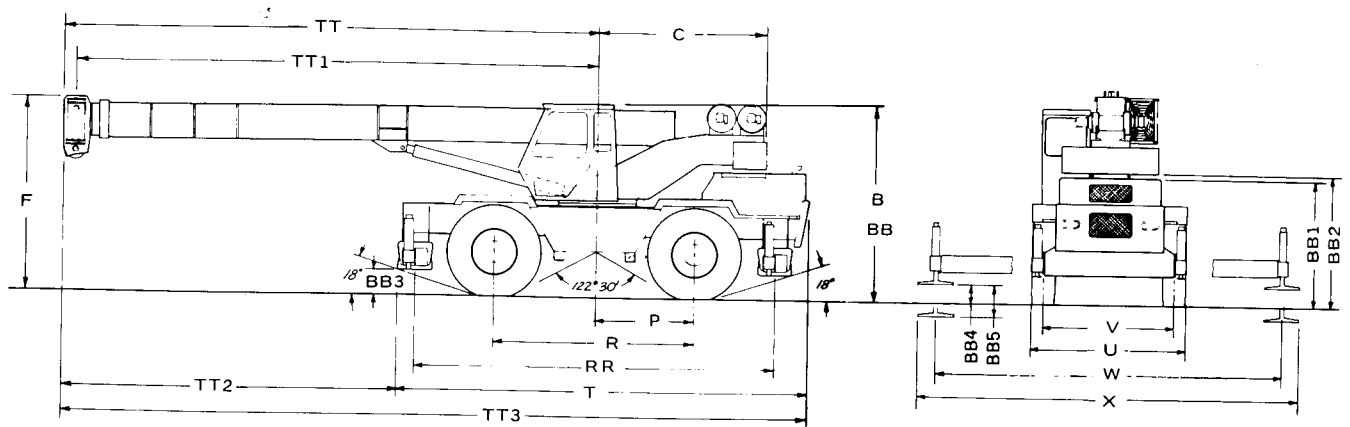
Boom Construction — New high-strength, four-plate construction with sideplate holes providing reduced weight. Welded boom head.

Jib Option — 32 foot (9.8 m) lattice jib with or without 17 foot (5.2 m) extendible tip section; side-stow type.

Maximum Reach — 130 feet (39.6 m) with fully-extended boom/jib combination.

LORAIN LRT 275

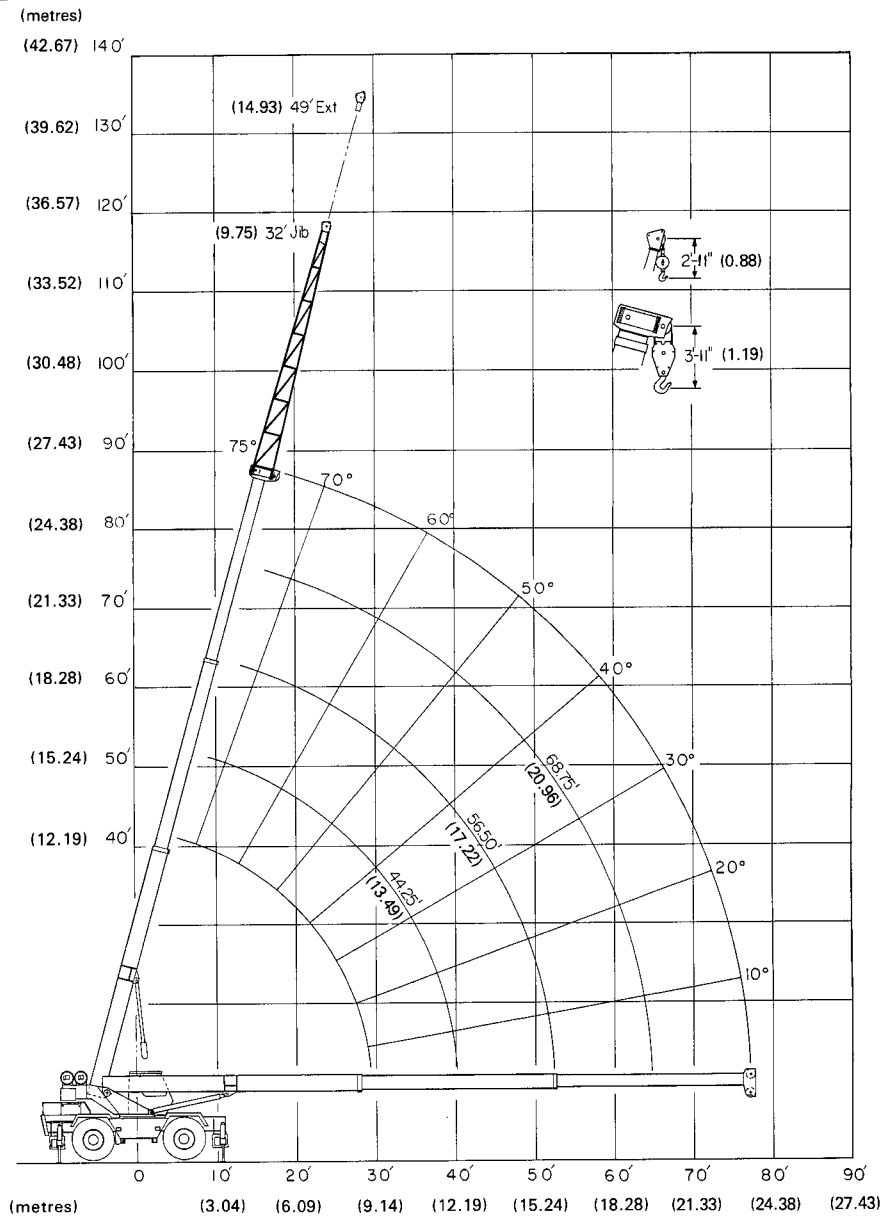
Basic Machine Diagram



BB4	Ground clearance to outrigger pedestal	13" (330 mm)
BB5	Maximum jack cylinder extension	22" (559 mm)
TT	Centerline of rotation to boom tip center	28' 10" (8.8 m)
TT1	Centerline of rotation to boom peak center	28' 2" (8.6 m)
F	Maximum height of boom	10' 5" (3.2 m)
TT2	Boom end to front of carrier	17' 7" (5.6 m)
TT3	Overall length	40' 10" (12.4 m)
T	Overall length of carrier	23' 3" (7.1 m)
RR	Centerline of front outrigger boxes to centerline of rear outrigger boxes	20' 5" (6.2 m)
R	Wheelbase	11' 5" (3.5 m)
P	Centerline of rotation to centerline of rear axle	5' 7.5" (1.7 m)
C	Tailswing radius	9' 9" (3.0 m)
BB1	Height of engine housing	7' 0" (2.1 m)
BB2	Height of counterweight bottom	7' 1-1/2" (2.2 m)
BB	Overall Height	11' 2" (3.4 m)
B	Height of cab	11' 2" (3.4 m)
X	Overall width over floats (Outriggers Extended)	20' 0" (6.1 m)
W	Effective length of extended outriggers	18' 0" (5.5 m)
U	Width of carrier	9' 0" (2.7 m)
V	Track (With 18.00 x 25 Tires)	7' 2" (2.2 m)
BB3	Ground clearance to outrigger boxes	16" (406 mm)

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

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, RADIUS 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 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.

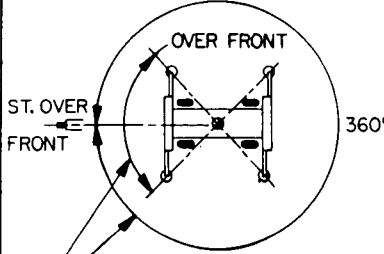
LORAIN LRT 275



27-1/2 TON CAPACITY
(25 METRIC TON CAPACITY)

Lift Capacity

PCSA Class 12-111
Stability 85%

ON OUTRIGGERS OVER FRONT												CRANE WORKING POSITIONS			
R A D I U S	A N G L E	BOOM LENGTH Retracted	A N G L E	BOOM LENGTH 44.25'	A N G L E	BOOM LENGTH 56.50'	A N G L E	BOOM LENGTH 68.75'	A N G L E	BOOM LENGTH Extended	R A D I U S				
10	65°	55,000	73°	51,000							10	<p>THESE LINES DETERMINE THE LIMITS OF WORKING POSITIONS WHICH CORRESPOND TO THOSE SHOWN ON THE CRANE CAPACITY CHARTS.</p>			
12	61°	55,000	70°	47,200	75°	36,600					12				
15	55°	49,400	65°	43,000	72°	34,200	75°	26,000			15				
20	43°	35,600	58°	36,000	66°	27,000	71°	21,500	75°	20,000	20				
25	27°	27,200	50°	27,700	61°	23,400	66°	18,200	72°	17,200	25				
30			41°	22,200	55°	20,600	62°	15,400	67°	14,800	30				
35			30°	18,200	48°	17,900	57°	13,600	63°	12,500	35				
40			9°	14,500	40°	15,200	52°	12,100	59°	11,200	40				
50					19°	10,200	40°	9,700	50°	9,000	50				
60							24°	7,400	40°	7,400	60				
70									26°	5,500	70				
75									16°	4,800	75				
ON OUTRIGGERS 360°												SIDE STOW JIB			
R A D I U S	A N G L E	BOOM LENGTH Retracted	A N G L E	BOOM LENGTH 44.25'	A N G L E	BOOM LENGTH 56.50'	A N G L E	BOOM LENGTH 68.75	A N G L E	BOOM LENGTH Extended	A N G L E	BOOM 32' JIB	A N G L E	BOOM 49' JIB	R A D I U S
10	65°	55,000	73°	51,000											10
12	61°	55,000	70°	47,200	75°	36,600									12
15	55°	46,900	65°	43,000	72°	34,200	75°	26,000							15
20	43°	33,800	58°	34,200	66°	27,000	71°	21,500	75°	20,000					20
25	27°	24,800	50°	25,500	61°	23,400	66°	18,200	72°	17,200					25
30			41°	18,300	55°	18,600	62°	15,400	67°	14,800	75°	9,400			30
35			30°	13,800	48°	14,200	57°	13,600	63°	12,500	72°	9,000	75°	5,300	35
40			9°	10,800	40°	11,100	52°	11,300	59°	11,200	70°	8,700	73°	4,900	40
50					19°	7,300	40°	7,500	50°	7,600	64°	7,700	68°	4,300	50
60							24°	5,100	40°	5,300	58°	5,800	63°	3,900	60
70									26°	3,700	52°	4,200	58°	3,400	70
75									16°	3,000	47°	3,600	55°	3,200	75
85											44°	2,600	50°	3,000	85
95											31°	1,800	44°	2,400	95
105											20°	1,200	37°	1,800	105
115													28°	1,300	115
125													15°	900	125

PARTS OF LINE

	1	2	3	4	5	6	7
MAIN HOIST	8,870	17,400	25,570	33,425	40,950	47,750	55,000
AUX. HOIST	6,300	12,370	18,180	23,760	29,110	33,950	39,100
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. 6 x 19 I.W.R.C. I.P.S. REG. LAY PREFORMED WIRE ROPE - MIN. BREAKING STRENGTH 17.9 TONS
AUX. HOIST LINE - 1/2" DIA. 6 x 19 I.W.R.C. I.P.S. PREFORMED WIRE ROPE - MIN. BREAKING STRENGTH 11.5 TONS

- 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.
- WHEN LIFTING OFF MAIN BOOM HEAD AND JIB IS ERECTED, DEDUCT 1800 LBS. FOR SIDE STOW JIB FROM MAIN BOOM LOAD CHART CAPACITIES.



27-1/2 TON CAPACITY (25 METRIC TON CAPACITY)

Lift Capacity

RECOMMENDED TIRE PRESSURES (PSI)			
TIRE SIZE	18.00 x 25	23.50 x 25	26.50 x 25
FOR WORK & TRAVEL	85	70	60

CAUTION

WITHOUT OUTRIGGERS, NEVER MANEUVER BOOM BEYOND 70' RADIUS OVER FRONT OR 40' RADIUS OVER SIDE TO ENSURE STABILITY.

ON TIRES ST. OVER FRONT				
R A D I U S	MAX. A N G L E	MIN. A N G L E	ALL BOOM LENGTHS	R A D I U S
10	75°	67°	48,500	10
12	75°	63°	42,500	12
15	75°	57°	35,300	15
20	75°	45°	21,700	20
25	75°	29°	16,100	25
30	74°	0°	11,500	30
35	69°	0°	8,100	35
40	61°	0°	6,200	40
50	52°	0°	3,600	50
60	41°	0°	2,000	60
70	27°	0°	1,200	70

ON TIRES 360°				
R A D I U S	MAX. A N G L E	MIN. A N G L E	ALL BOOM LENGTHS	R A D I U S
10	75°	67°	26,500	10
12	75°	63°	21,100	12
15	75°	57°	15,700	15
20	75°	45°	10,600	20
25	75°	29°	6,600	25
30	74°	0°	4,100	30
35	69°	0°	2,600	35
40	61°	0°	1,800	40



Operating Weights (Approximate)

WEIGHT: 55,060 lbs. (24 975 kg) with 81 ft. (24.7 m) boom and 4,300 lb. (1950 kg) counterweight.

Weight Distribution	Front	Rear	Total
Standard Machine	29,800 lbs. (13 517 kg)	25,260 lbs. (11 458 kg)	55,060 lbs. (24 975 kg)
32 ft. (9.8 m) jib	add 1,775 lbs. (805 kg)	sub 725 lbs. (329 kg)	add 1,050 lbs. (476 kg)
49 ft. (14.9 m) jib	add 1,936 lbs. (878 kg)	sub 536 lbs. (243 kg)	add 1,400 lbs. (635 kg)
Auxiliary Winch	add 83 lbs. (38 kg)	add 117 lbs. (53 kg)	add 200 lbs. (91 kg)
23.50 X 25 Tires	add 210 lbs. (95 kg)	add 210 lbs. (95 kg)	add 420 lbs. (190 kg)