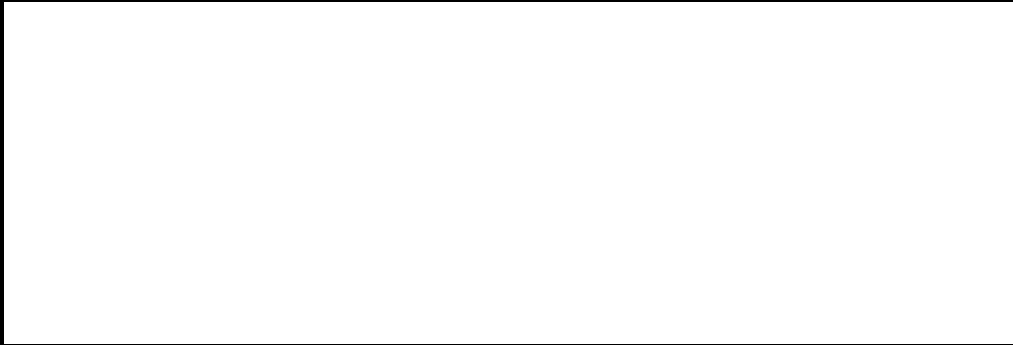


LORAIN[®] LCD SERIES

10 ton (9.07 mt)
to 18 ton (16.33 mt)
rough terrain cranes



THE INVENTORS



OF THE RUBBER-TIRED CRANE ARE STILL AT IT

LCD
S E R I E S

LORAIN[®] LCD SERIES CRANES

AN INDUSTRIAL SIZE CRANE WITH ROUGH TERRAIN CAPABILITIES

It's a unique combination. Lorain has packaged all the attributes users are looking for in a small size industrial crane with the reach, power and features normally only found in larger size rough terrain cranes to provide the most cost effective answer to many lifting and pick-and-carry needs.

Put a premium on compactness and versatility? The low profile, cab down LCD is less than 8' (2.4 m) high, 8' (2.4 m) wide and has a gross vehicle weight of just 24,725 lbs. (11 215 kg). And boom, jib, carry deck and other options let you choose exactly what you need to fit your lifting needs, no more, no less.

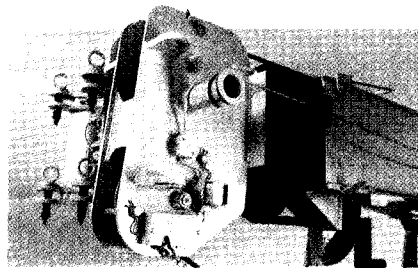
Looking for lifting power and rough terrain capabilities? Get up to 18 ton (16.33 mt) maximum capacity at 5 ft. (1.5 m) radius. Plus planetary drive/steer axles, four-wheel drive and four-wheel (three mode) steering are standard.

Check out a Lorain LCD Series crane soon. Its versatility and value for the dollar will surprise you. You'll find it's

a totally different and better alternative for many lifting jobs.

IMPRESSIVE LIFT CAPABILITIES

Maximum boom tip height with standard 36-ft. (10.97 m) tip section and 15 ft. (4.57 m) swing-on offsetable jib option is 56 ft. (17.7 m). Go to 71 ft. (21.64 m) with the optional 52 ft. (15.85 m) three-section boom and jib combination. Swing-on offsetable jib sets up quickly and provides up and over reach ability that would require a much larger machine without offset capability to match. Mechanically self-proportioning boom design maintains ideal strength-to-length working ratios.



Quick-reeving boom head

Standard anti-two-block system with audio/visual warning and automatic function disconnects

Quick-reeving block

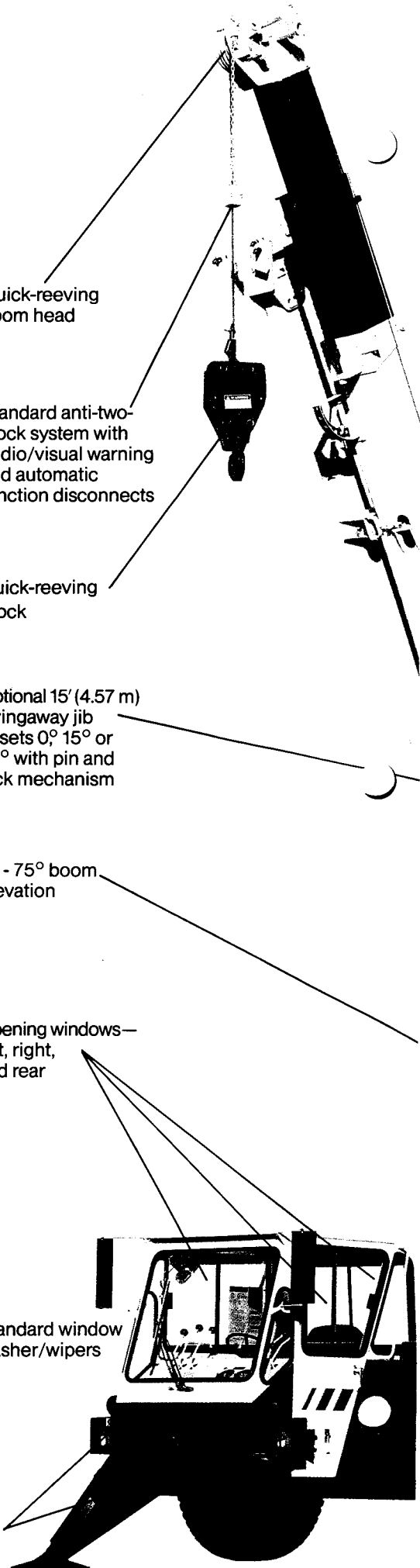
Optional 15' (4.57 m) swingaway jib offsets 0°, 15° or 30° with pin and lock mechanism

0° - 75° boom elevation

Opening windows—left, right, and rear

Standard window washer/wipers

Complete protected light package



LCD S E R I E S

Standard 36' (10.97 m),
two-section boom;
optional 52' (15.85 m),
three-section boom

Optional 52' (15.85m),
three-section full-
power boom

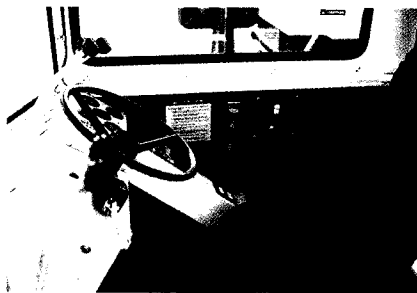
Bolt-on
counterweight

All boom and outrigger cylinders are equipped with integral hold valves.

Lorain's quick-reeving design on boom head and block makes line changes quick and easy. Other features include a single lever boom extension, 360° continuous rotation with self-locking swing, and pendulum-type boom angle indicator.

A GREAT PLACE TO WORK

Environmentally-designed operator's cab is sound and weather insulated, with easy entry and exit from ground level. Adjustable bucket seat with head and arm rests decreases fatigue and increases productivity. Other features include dash-mounted controls for all major crane functions, complete instrumentation and signal horn, seat belt, safety glass, electric window washer/wipers, hand and boot throttle control, removable door, sliding right, left and rear windows, and more.



EXCELLENT WINCH POWER

Maximum line speed is 275 fpm (84 mpm), and maximum line pull is 7,460 lbs. (3384 kg). Fully-enclosed multi-disc winch brake provides smooth, precise control.

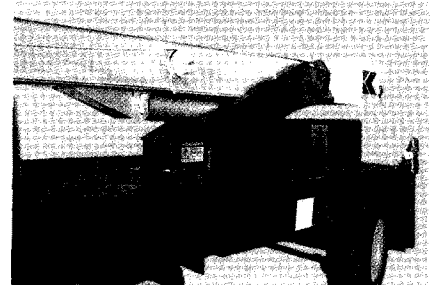
Lockable tool box
and battery box

4 x 4 drive with
4-wheel steer

Fold-down outriggers
with self-storing floats

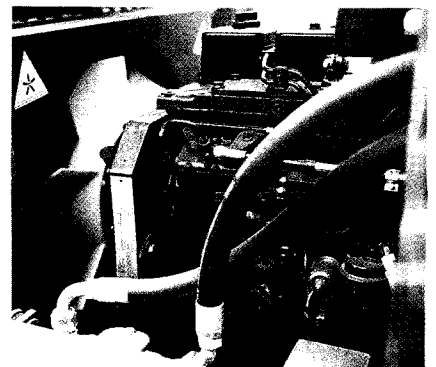
LORAIN DESIGNED CARRIER CHASSIS

The LCD carrier chassis is Lorain designed and built specifically for rough terrain service. Optional carry decks have a 66.5 sq. ft. (6.18m²) surface area, and provide a maximum capacity of 20,000 lbs. (9072 kg). Four-wheel drive and four-wheel steer offer exceptional maneuverability.



POWERED FOR PERFORMANCE

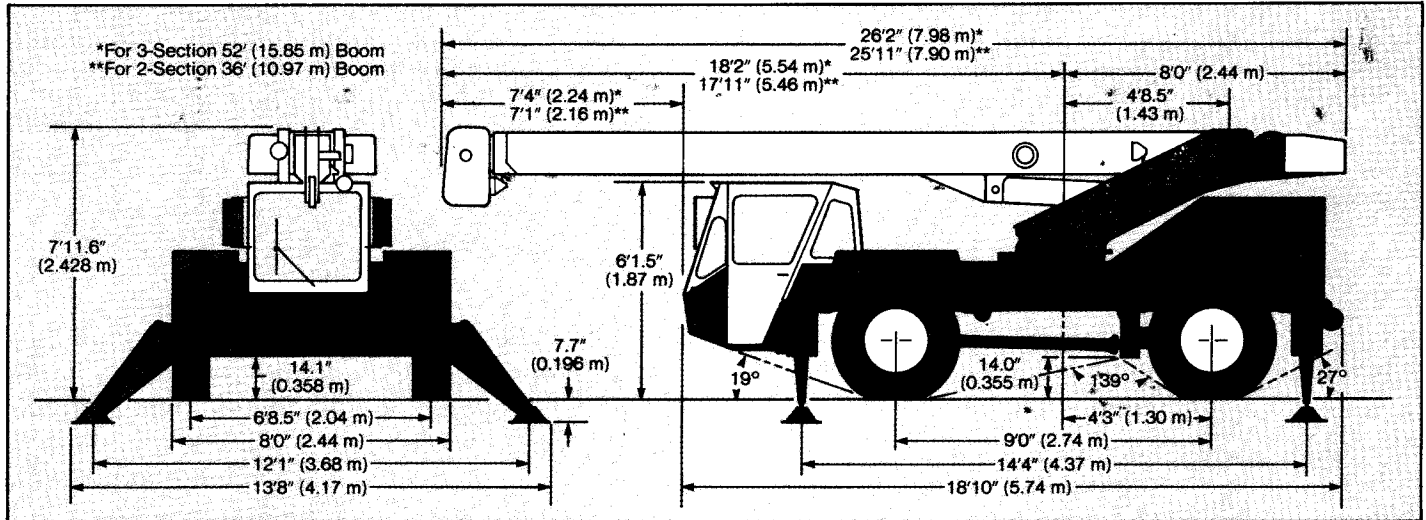
Dependable, heavy-duty diesel engine provides all the power you'll need to get up and go. Standard full powershift transmission with torque converter has 4 speeds forward, 4 reverse. Axles are planetary drive/steer type. Hydraulically-assisted split braking system has self-adjusting brakes to provide effortless slowdown and stop.



Machines shown may have optional equipment.

LORAIN® LCD SERIES—COMPACT, POWERFUL, VERSATILE

DIMENSIONS (standard-equipped)



SPECIFICATIONS (standard-equipped)

Swing Speed	2.9 rpm
Gross Vehicle Weight	24,725 lbs (11 215 kg)*
Engine	
Model	Cummins 4B3.9
Type	4-cylinder, water-cooled, nat. aspirated
Bore & Stroke	4.02 x 4.72 in. (102.1 x 119.9 mm)
Total Displacement	239 cu in (3917 cc)
Max. Gross H.P.	80 hp @ 2800 rpm
Net H.P.	62 hp @ 2800 rpm
Max. Gross Torque	184 lbs•ft/1200 rpm (25.4 kg•m/1200 rpm)
Starting System	24 volt
Fuel Tank Capacity	44 gallons (166 litres)

*Add 590 lbs. (268 kg) for optional 15 ft. (4.57 m) swing-on jib. Gross vehicle weight for LCD 150 with optional 52.3 ft (15.94 m) boom and 15 ft. (4.57 m) jib is 27,255 lbs. (12 363 kg).

ENGINE PERFORMANCE

Gear	Forward Drive	Maximum Speed	Maximum Tractive Effort	Gradeability @ Stall
1	2 or 4	3.5 mph (5.6 km/h)	19,469 lbs. (8831 kg)	102.6%
2	2 or 4	6.7 mph (10.8 km/h)	10,267 lbs. (4657 kg)	40.4%
3	2 or 4	12.2 mph (19.6 km/h)	5,590 lbs. (2536 kg)	19.9%
4	2 or 4	20.7 mph (33.3 km/h)	3,008 lbs. (1364 kg)	9.6%

HYDRAULIC EQUIPMENT

Pumps	Two gear type pumps in tandem, driven off transmission. Combined system capacity is 39 gpm (148 l/min). 1—21 gpm (80 l/min) @ 2750 lbs/in ² (210 kg/cm ²) for steer swing, boom hoist, telescope, outrigger, and winch boost. 1—18 gpm (68 l/min) @ 2650 lbs/in ² (185 kg/cm ²) for winch
Swing Motor	Geroler type
Boom Hoist Cylinder	8.5" (22 cm) bore x 3.5" (8.9 cm) rod x 39.3" (100 cm) stroke
Reservoir Capacity	24 gallons (91 litres)
System Capacity	43 gallons (163 litres)
Filtration	10 micron return line filter 140 micron suction element

WINCH PERFORMANCE

Max. Line Speed (no load)	
First Layer	177 fpm (54 m/min)
Fourth Layer	236 fpm (72 m/min)
Full Drum	275 fpm (84 m/min)
Max. Line Pull	
First Layer	7460 lbs (3384 kg)
Fourth Layer	5600 lbs (2540 kg)
Full Drum	4800 lbs (2177 kg)
Permissible Line Pull	
6350 lbs (2880 kg)	
Drum Dimensions	
Diameter	8.5 in (216 mm)
Length	12.2 in (311 mm)
Flange Diameter	14.6 in (370 mm)
Drum Capacity	
Max. Storage	439 ft (134 m)
Max. Useable	350 ft (107 m)*
Cable	
0.50 in x 275 ft (12.7 mm x 84 m)	

*Based on minimum flange height above top layer to comply with ANSI B30.5

WE RESERVE THE RIGHT TO AMEND THESE SPECIFICATIONS AT ANY TIME WITHOUT NOTICE. THE ONLY WARRANTY APPLICABLE IS OUR STANDARD WRITTEN WARRANTY APPLICABLE TO THE PARTICULAR PRODUCT AND SALE. WE MAKE NO OTHER WARRANTY, EXPRESSED OR IMPLIED.



Koehring Cranes & Excavators
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