HC-108 B Zephyrcrane

Feature for feature... matchless in its work range

Check this Buyer's Guide to quick facts and features.

UPPER

CARRIER

STANDARD

UPPER

Speed-o-Matic controls
All-welded, stress-relieved upper frame
Involute-splined heat-treated shafting throughout
Machine cut spur gears and pinions
Exclusive drum shaft design
Extended front and rear drum shafts
Fully interchangeable clutches
Independent boomhoist
Boom lowering clutch
Eight adjustable conical hook rollers, mounted in four equalized pairs
Rollers, roller brackets and roller path are heat-treated
Pin-connected crane boom
Two-piece, box-lattice crane boom
Fixed boom backstops—spring loaded bumpers (standard angle boom)
Friction type swing brake
Heavy duty retractable high gantry
Extender cables
Foot-throttle
Three boompoint sheaves on anti-friction bearings
Boomhoist lever kick-out device

CARRIER

Heavy-duty custom built 4-axle carrier
Hydraulic power steering
Planetary rear axles
12 speeds forward and 3 reverse
Tapered rear outrigger assembly
Double box, removable front and rear outriggers with full width sliding beams
Outrigger beams mounted on rollers
Full width fenders
Storage type running boards
8 x 4 drive
8-wheel brakes

OPTIONAL

UPPER

Wide selection of gasoline or diesel engines equipped with friction clutch, hydraulic coupling or torque converter

Cotta two-speed transmission for gasoline engines

Throttle control mounted on swing or hoist levers

Reversing clutches for either or both main operating drums

Third operating drum

Hydraulic jack for raising or lowering retractable high gantry

Elevated cab

"HI-LITE" tubular boom with telescopic boom backstops

Crane boom cable supporting rollers

Crane boom angle indicator

Visual drum rotation indicator

Two-speed hoist drums

CARRIER

Electric remote control

Screw-type outrigger jacks and light-weight pontoons

Hydraulic outrigger beams and jacks (cab or ground controlled arrangements available or combination of both)

Choice of diesel engines

MEMBER PCSA POWER CRANES AND EXCAVATORS STANDARDIZATION

These specifications comply with the recommended Crane Specification Standard CS80-58 developed under the National Bureau of Standards, issued by the United States Department of Commerce.

LINK-BELT SPEEDER

Cedar Rapids, Iowa • Woodstock, Ontario, Canada

Power cranes and shovels . . . diesel pile hammers . . . all hydraulic excavators

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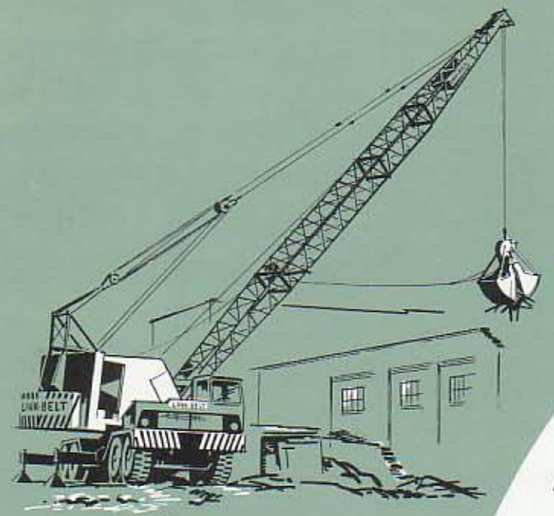
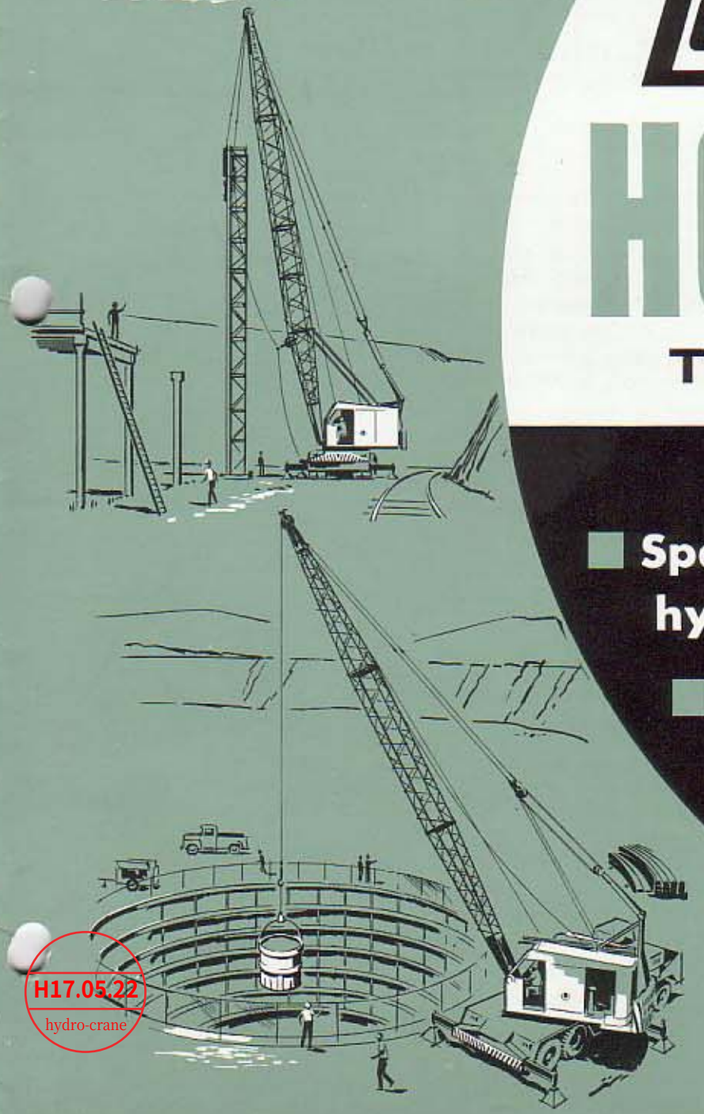




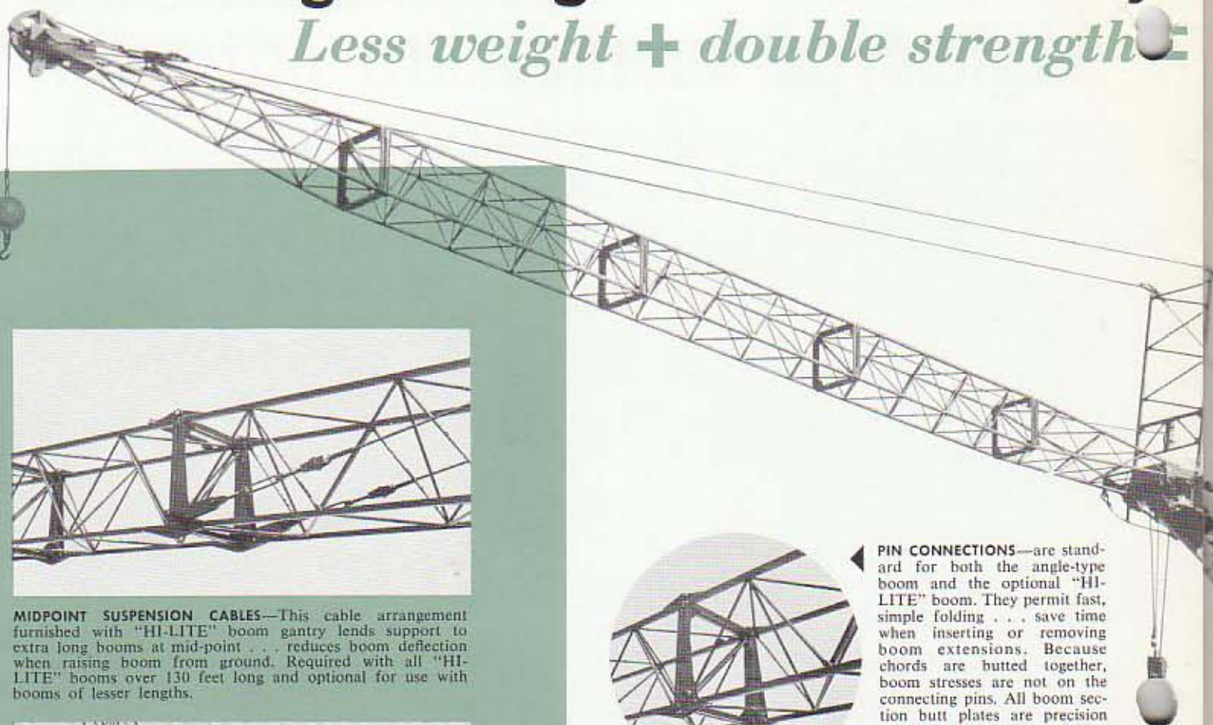
LINK-BELT SPEEDER

45-TON Zephyrcrane HC-108B TRUCK-CRANE

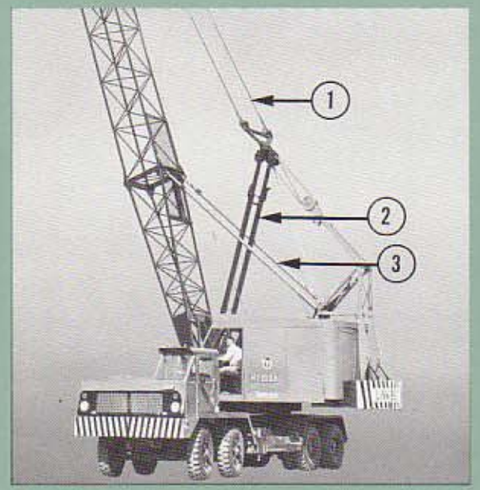
- Speed-o-Matic power hydraulic controls
- Angle-type boom and revolutionary "HI-LITE" boom

For long booming . . . the revolutionary

Less weight + double strength =



MIDPOINT SUSPENSION CABLES—This cable arrangement furnished with "HI-LITE" boom gantry lends support to extra long booms at mid-point . . . reduces boom deflection when raising boom from ground. Required with all "HI-LITE" booms over 130 feet long and optional for use with booms of lesser lengths.



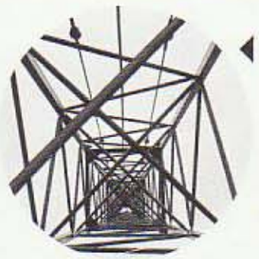
❶ **EXTENDER CABLES** (Standard) connect bridle or "Hi-Lite" boom gantry to boom head. For long boom work—over 130 feet—two sets of extender cables are required—one set to boom head and the other to boom at mid-point. Reduces boom deflection when raising boom from ground.

❷ **SPECIAL "HI-LITE" BOOM GANTRY** is required for "Hi-Lite" boom only if over 130 feet long, to increase the angle of support and give a better angle of lift. It can also be used for booms under 130 feet. . . converts to a short boom for dismantling . . . see strip-down Page 14.

❸ **SPRING-LOADED TELESCOPIC BOOM BACKSTOPS** especially designed for "Hi-Lite" boom to give rigid, high support at minimum radius . . . also repin to "Hi-Lite" boom gantry only when main boom is removed.

PIN CONNECTIONS—are standard for both the angle-type boom and the optional "HI-LITE" boom. They permit fast, simple folding . . . save time when inserting or removing boom extensions. Because chords are butted together, boom stresses are not on the connecting pins. All boom section butt plates are precision machined to eliminate possible high spots . . . assure proper full-face mating of sections.

THREE SHEAVE HEAD MACHINERY for either standard angle boom or optional "HI-LITE" boom features three boom-point sheaves mounted on anti-friction bearings. No need to lower boom for daily greasing. Triple sheaves permit multiple reeving of hoist line for extra fine control in spotting loads. Jib peak sheaves also on anti-friction bearings.



A STUDY IN SYMMETRY is this end view of the optional "HI-LITE" tubular boom. Pyramid-like, tetrahedronal cross bracing design cuts long boom deflection and whipping action to a safe minimum. The four main chords are sealed square tubes of high-strength, light-weight alloy steel Latticework and internal cross bracing are of sealed, round tubing.

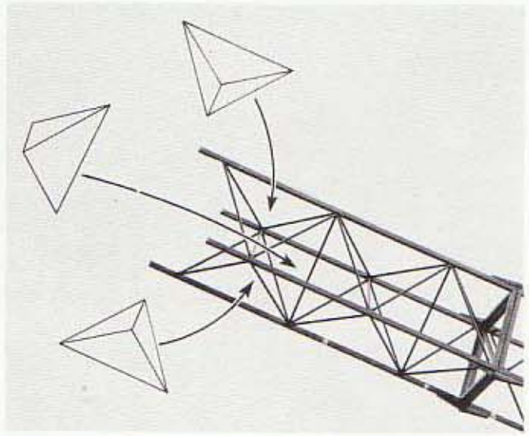
"Hi-Lite" tubular boom design

More capacity, longer reach

HC-108B CRANE
"HI-LITE" BOOM

Unassisted, the HC-108B raises a total of 200 feet of boom and jib from ground to sky . . .

Applied geometry and new steel pay off. Use of an age-old geometric figure—the tetrahedron—plus high strength, light weight steel tubing explains how it's possible for this 45 ton rig to pick up from the ground 150 feet of main boom plus 50 feet of jib or 150 feet of main boom alone . . . *both unassisted* . . . with "Hi-Lite" boom.



TETRAHEDRON IS STRONGEST OPEN BRACED GEOMETRIC FIGURE and is the only geometric figure made of just four sides. And, because the four sides are all triangular in shape, this pyramid-like structure offers the greatest resistance to stresses or loadings from all directions. Hundreds of these triangles combine to form scores of tetrahedrons throughout the length of the "Hi-Lite" boom. All work together as a brace against the combined forces of compression, torsion and tension.

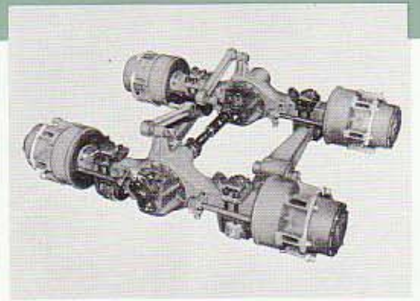
CABLE SUPPORTING ROLLERS are required when a third drum cable passes over crane boom. One roller is furnished as standard for "Hi-Lite" booms, 40 feet to 100 feet long. These rollers, full width of boom and mounted on anti-friction bearings, protect any long boom from cable slap or wear, also give longer cable life.

Job-tailored safety-rated features include

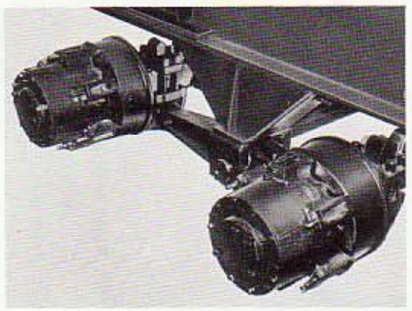
spring-loaded fixed boom backstops for angle booms and telescopic boom backstops for "Hi-Lite" booms, extender cables for both booms, hydraulic controlled swing brake, independent boom-hoist . . . power up and down, automatic brake and safety locking pawl, boom hoist kickout device. Among optional features are boom angle indicator, drum rotation indicator, cable supporting rollers for top side of crane booms and roller type hoist cable guards for both crane booms.

HC-108 B CARRIERS

cat-quick on the road...tigers on the job



PLANETARY AXLES are well suited for truck-crane carriers because they provide high mechanical efficiency and place the final force at the rim of the wheel for greater traction effort. Additional advantages are their relative lightweight, low maintenance record and high ground clearance.



BOGIE OR WALKING BEAM SUPPORT for both front and rear axles on 4-axle carrier allows tandem wheels to follow uneven terrain for maximum traction and mobility.

Standard 4-axle carrier

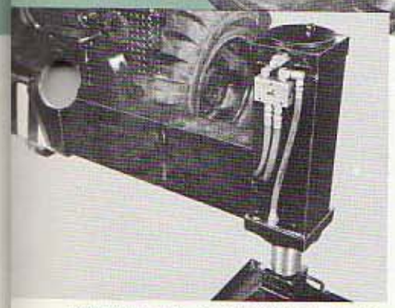
Custom-built to Link-Belt Speeder's specifications, this specially designed carrier provides a sturdy, stable working platform for all lifting crane jobs . . . offers the quality construction needed for many years of trouble-free service.

It features these outstanding customer benefits as standard equipment:

- Hydraulic power steering
- Full-floating walking beam support for tandem front and rear axles
- 12 speeds forward and 3 reverse provide a wide range of speeds for both on and off-highway travel
- 8 x 4 drive
- Planetary rear axles
- 8-wheel air brakes
- Removable front and rear outrigger boxes and beams
- Diamond plate rear fenders

Optional features include:

- Diesel engine
- Electric remote control
- Screw-type outrigger jacks and lightweight pontoons
- Hydraulically controlled outrigger beams and jacks

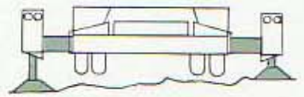


HYDRAULIC OIL IS POSITIVELY checked in each cylinder by a pilot-operated safety check valve . . . fixed connection between check valve and cylinder . . . assuring maximum safety during lifts. Check valve and connections are protected by a steel plate (not shown).

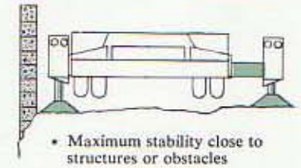
REMOVABLE FRONT AND REAR OUTRIGGER BOXES AND BEAMS add to the ease of stripping weight from the HC-108B for highway travel. Full-width, double sliding beams in both front and rear boxes are mounted on rollers for fast, easy extension or retraction. Screw-type outrigger jacks are optional and the lightweight pontoons, also optional, feature a quick connect and disconnect socket.

Power Hydraulic Outriggers

Optional hydraulic outriggers have individual beams and piston jacks which are positioned quickly and accurately. Maximum stability is insured even on the roughest terrain or close to structures or obstacles. No additional cribbing for proper adjustment is necessary. Directional control valve at operator's stand provides oil pressure for the hydraulic outriggers. This valve locks existing pressure in the Speed-o-Matic system and assures no loss of pressure at the operator's control panel while positioning the hydraulic outriggers. All hoses are concealed in the outrigger beams to prevent any external abuse. A [illegible] valve on each jack cylinder prevents loss of pressure due to accidental line breakage. Quick disconnect on hoses permits outrigger boxes to easily be removed.



• Maximum stability on roughest terrain



• Maximum stability close to structures or obstacles

Three Optional Arrangements

- Two-point contact (rear only) with individual cab controls for both beams and jacks.
- Four-point contact (front and rear) with individual ground-operated controls for beams and jacks at all four contact points.
- Four-point contact with rear two points operable from operator's cab.